Maternal and Child Health Services
Title V Block Grant

State Narrative for Puerto Rico

Application for 2009
Annual Report for 2007

Document Generation Date: Monday, September 22, 2008

Table of Contents

I. General Requirements

A. Letter of Transmittal

The Letter of Transmittal is to be provided as an attachment to this section.
An attachment is included in this section.

B. Face Sheet

A hard copy of the Face Sheet (from Form SF424) is to be sent directly to the Maternal and Child Health Bureau.
An attachment is included in this section.

C. Assurances and Certifications

By signing the SF424 Form and submitting the Title V Block Grant (BG) Application for 2005-2006, the Puerto Rico Department of Health (PRDoH) is committed to comply with all requirements established by OBRA'89 (PL 104-193, 1996). Funds allotted to PR will only be used for addressing the identified needs of women in their reproductive age, their infants, children and adolescents, including those with special needs and their families; and for the proper management and implementation of the action plan as described in the application. The allotted funds will be fairly distributed across all geographical areas for the different MCH population groups in accordance to the mandate (30-30-10).

Under any circumstance the Title V Block Grant funds will be used for construction or the purchase of land.

We will comply with all applicable requirements of other federal laws, executive orders, regulations and policies governing this program.

The undersigned agrees that the PRDoH will comply with the Public Health Service terms and conditions if the grant is awarded as a result of the submitted application.

Additionally, we certify that services will be rendered in a smoke-free environment, to provide a drug-free workplace in accordance with 45 CFR Part 76, and to comply with the prohibition of using federal funds to support any activity regarding lobbying or its appearance to.

/2007/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2006-2007, the Puerto Rico Department of Health reiterates all its commitments stated above.//2007//

/2008/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2007-2008, the Puerto Rico Department of Health reiterates all the commitments stated above.//2008//

/2009/ By signing the SF424 Form and submitting the Title V Block Grant Application for FY 2008-2009, the Puerto Rico Department of Health reiterates all the commitments stated above.//2009//

D. Table of Contents

This report follows the outline of the Table of Contents provided in the "GUIDANCE AND FORMS FOR THE TITLE V APPLICATION/ANNUAL REPORT," OMB NO: 0915-0172; expires May 31, 2009.

E. Public Input

/2007/ Public input was obtained from a wide array of stakeholders including, but not limited to, women of child bearing age, adolescents, front line providers (home visiting nurses and community health workers), regional MCH staff, OB and other perinatal providers, pediatricians, collaborators from other agencies and programs serving the MCH population, professional organizations, members of the Healthy Start Consortium (also the MCH Advisory Body), Regional SSDI Inter agency Working Groups, etc., on a regular and ongoing basis. An ad was published on June 9-11, 2006 in two newspapers of wide circulation, "El Nuevo Día" and "El Vocero", requesting input from the concerned general public. Persons interested in reviewing and submitting recommendations could review a copy of the application and the Needs Assessment in Aguadilla, Bayamón, Caguas, Ponce and San Juan on June 12-13, 2006. Written recommendations were due June 20, 2006. This year a notice was posted in the PRDoH web page from June 1-13, 2006.

No one requested to review the proposal. The notice posted on the DoH web page was read by 372 persons.//2007//

/2008/ Public input was also obtained from a wide array of stakeholders including, but not limited to, women of child bearing age, adolescents, front line providers (home visiting nurses and community health workers), regional MCH staff, OB and other perinatal providers, neonatologists, pediatricians, neonatal and materno-fetal nurses, infant and maternal mortality committee members, and positive youth development model committee members, collaborators from other agencies and programs serving the MCH population, professional organizations, members of the Healthy Start Consortium and Regional SSDI Interagency Working Groups, on a regular and ongoing basis. Other important public input is feedback from HVP participant committee, Youth from the Positive Youth Development Committee. An ad was published on June 15, 16, 17 and 18, 2007 in three newspapers of wide circulation, "El Nuevo Día", "El Vocero" and "Primera Hora", requesting input from the concerned general public. Persons interested in reviewing and submitting recommendations could review a copy of the application and the Needs Assessment in Aguadilla, Bayamón, Caguas, Ponce and San Juan on June 21-22, 2007. Written recommendations were due June 27, 2007.

The proposal was reviewed by the Office of the Commissioner of Insurance and a Pediatric Nefrologist from University of Puerto Rico, Medical Science Campus. Their recommendations were integrated to our block grant proposal.//2008//

/2009/ An ad was published June 6-7, 2008 in 2 newspapers requesting public input. Three persons reviewed the proposal and two submitted written recommendations. A notice was also posted in the DoH web page in June. This page receives 1,260 hits per month.

The Leadership Workshop on EPSDT and Title V Collaboration provided stakeholders the opportunity to analyze the health care system and the MCH health status. Afterwards they offered input on their priority work areas which were: reviewing EPSDT guidelines, uniform use of the ASQ tool and supporting PCP implementing a Medical Home. Additional input was obtained from RWG, Consortia, and Committees.//2009//

An attachment is included in this section.

II. Needs Assessment

In application year 2009, it is recommended that only Section IIC be provided outlining updates to the Needs Assessment if any updates occurred.

An attachment is included in this section.

C. Needs Assessment Summary

The PR MCH needs assessment process is a continuous activity carried out on a year-round basis. It provides the necessary feedback to readjust the MCH work plan to respond better to changes in health needs of the target population.

Currently we are focusing on four main categories as the contributing factors to maternal and infant morbidity and mortality. They are: sociodemographic factors, lifestyles and maternal health, prenatal and perinatal factors and postneonatal factors.

According to the US Census Population Estimates, in 2005 the number of women in their reproductive age (WRA 10-49 years) was 1,135,742. This is almost one third (32%) of the total population in PR (3,912,054) and 29.4% corresponds to 0-19 year old children.

The number of births per year decreased from 50,803 in 2003 to 50,687 in 2005; decreasing only 0.23%. Therefore, the crude natality rate remained steady during this period with 13.1/1,000 persons in 2003 to 13/1,000 inhabitants in 2005.

The most outstanding findings from the ESMIPR 2006 were: 65.5% of surveyed mothers did not plan the index pregnancy; 6.9% said that they did not want to be pregnant then or at any time in the future; 20.8% gained weight below the recommendations; and, 44.5% gained more weight than the recommendations. Among surveyed women, 58.5 % did not consume folic acid or multivitamins during the month prior to conception. Also, 2.7% of surveyed mothers smoked, 3.4% reported alcohol consumption and 0.3% used some illicit drug during pregnancy. The prevalence of pregnancy complications requiring between one and over four hospitalizations was 24.7%.

VS data for PR in 2005 reported that approximately 1 in 4 pregnant women initiated PNC after the first trimester or had no PNC. These women are more likely to have poor maternal and birth outcomes.

The target set by HP 2010 regarding fetal deaths is 6.8/1,000 live births. In 2005, 548 stillbirths (SB) were registered in PR. This represents a SB rate of 10.7/1,000.

Maternal and infant mortality are basic health indicators that reflect the nation's health status well being. Therefore, the MCH Division has established a SiVEMMa and SiVEMI. The IM rate 9.3 for 2005 continues to be above the mainland rate and the HP 2010 goal of 6.2/1,000 live births. Some contributing factors are negative social conditions, unhealthy physical environments, quality of prenatal, perinatal and postneonatal care.

The postneonatal mortality rate should not surpass the rate of 2.4/1,000 live births by 2010. In PR the postneonatal mortality rate is close to that target. From the 50,687 live births of 2005, 137 babies died during the postneonatal period for a rate of 2.7/1,000.

In 2005-2006, the most commonly reported health conditions in Head Start children were dental caries (43.4%), asthma (22.5%), anemia (13.4%), overweight (9.9%), underweight (3.9%) and Pediculosis (3.7%).

In 2005, there were 42 deaths in preschool children aged 1-4. The five leading causes of death were: unintentional injuries (16.7%), congenital anomalies (14.3%), diseases of the circulatory system and nervous system (11.9%, each), malignant tumors (9.5%), and diseases of the respiratory system (7.1%).

Mortality among children 1-14 years of age has declined during the past decades. In 2005, the death rate in this age group was 13.6/100,000 vs. 29.2/ 100,000 in 1995. The leading causes of death were unintentional injuries (17.4%), malignant tumors (8.3%), and congenital anomalies (6.4%).

For 2005, unintentional injuries were a significant public health concern in PR. The most common causes for unintentional injuries in PR among children and adolescents (1-19 years) are associated with motor vehicles, poison, drowning, choking, falls and burns. They were the first cause of death among adolescents 10-14 years of age and the second cause for death for the 15-19 years group.

In regards to the MCH Program capacity we have the Asthma Project, Asthma Surveillance System, ECCS, BDSS, and the Folic Acid campaign. Our MCH Division continues following the PR Health Care Delivery System to address our population needs.

On the 2005 needs assessment for CSHCN 0 - 21 years old the first 4 most frequent conditions were bronchial asthma, congenital anomalies, mental disorders and diabetes mellitus according to data provided by PININES, ASES and the Health Insurance Commissioner. Data from the PR Continuous Health Survey for year 2001 showed that ADD and Mental Retardation were the most common disabilities among children 0-21 years. The BDSS showed that the 3 most frequent conditions diagnosed at birth or until age six were Congenital Heart Defects, Cleft Lip/Palate and Down Syndrome.

Among major difficulties expressed by families through focus groups are referrals to specialists, lack of care coordination and family-centered services, non-covered costs by health insurance, lack of information on available services and how to gain access, lack of communication among specialists and primary physicians and limited knowledge of physicians on typical child development.

Identified priorities include improved coordination among health care plans and primary physicians, health professionals and community based-organizations and to promote successful transition of youth to adult life.

Pediatric Centers served a total of 8,172 for FY 2005-2006. This data includes children 0-3 years old served by the EIP. The 3 most common disabilities among 3-21 years children enrolled in the PR Special Education Program were Specific Learning Disorders, Speech and Language Disorders and Mental Retardation (Table II-6). PININES data as of March 2007 revealed that 470,097 children 0-21 years were determined as eligible for GIP; of these 16,120 children had a special need condition.

/2009/ PC served a total of 7,885 in FY 2006-2007. PININES March 2008 data revealed 447,829 children 0-21 years were eligible for Medicaid and GIP; of these 15,581 were CSHCN.

The MCH Division and collaborators constantly update pertinent MCH data, identify highly prevalent emerging health conditions, conduct surveillance, monitor changes in public policies, evaluate experts' opinions and recommendations and the political environment. Emerging pediatric trends in areas such as obesity, mental and oral health led to expanding priority 3 to include pediatric health.//2009//

We hope this Needs Assessment has provided a clear vision not only of the needs of the MCH

population, but also of our efforts toward improving the health of the PR women, infants and children.

III. State Overview

A. Overview

Geography and Political Context

Geography: Puerto Rico (PR) is a Commonwealth of the United States (U.S.). It is the smallest of the Greater Antilles islands located in the Caribbean, about 1,000 miles southeast of Miami and 80 miles West of the U.S. Virgin Islands. The island of PR is 100 miles long and 35 miles wide for an approximate area of 3,500 square miles. Puerto Rico has four main offshore islands--Vieques and Culebra to the east, and Mona and Desecheo to the West. Mona and Desecheo are deserted islands. The population of Vieques and Culebra has to travel to PR in small planes and boats in order to access secondary, and tertiary health care as well as other human services.

The Dominican Republic, another of the Greater Antilles islands, is located west of Puerto Rico. Our proximity allows for mutual tourism and the sharing of economic and cultural resources. However, it also allows the entry of a significant number of illegal immigrants affecting our health care systems as well as our health indicators.

Geographically, the Island is divided in 78 jurisdictions known as municipalities, each headed by a mayor who is elected every four years. The largest municipalities in Puerto Rico are San Juan, the capital; Bayamon, Carolina, Caguas, Arecibo, Mayaguez and Ponce.

The climate of the Island is a tropical maritime one, with an average high temperature of 86 degrees (F) and a low average temperature of 66.9 degrees (F). The Atlantic Ocean borders the North of PR and the Caribbean Sea border the South Coast. Due to its location in the Caribbean, PR is highly vulnerable to the strike of hurricanes.

Political Context: Puerto Rico has been part of the United States since the end of the Spanish-American War (1898), and became a commonwealth in 1952. Politically, the Island resembles the 50 states. Every four years, the people of Puerto Rico elect a governor, 28 senators, and 51 House members to serve in the local government. Puerto Rico's voters also elect a nonvoting delegate to the U.S. House of Representatives.

The United States maintains control over Puerto Rico's military defense, transportation, immigration, foreign trade, and many other areas of governance. Puerto Rican residents contribute to Social Security, serve in the U.S. military, and can be called for military service. They do not pay federal income taxes and do not vote in U.S. presidential elections. Puerto Ricans are eligible to participate in federal government programs, but levels of assistance are typically lower than those provided for people living in the 50 states and the District of Columbia. For example, in 2004-2005, the average monthly payment to families through the Temporary Assistance for Needy Families (TANF) program was $60 in Puerto Rico, compared with $454 in New York--the state where Puerto Ricans are most highly concentrated.

/2008/ In 2005-2006, the average monthly payment to families through the Temporary Assistance for Needy Families (TANF) program was $58.84 in Puerto Rico.//2008//

In addition to TANF, there are several other federal programs that provide support for low-income children and families in Puerto Rico, including nutritional assistance programs, Head Start, Job Corps, and school lunch programs. Residents of Puerto Rico are not eligible to receive Supplemental Security Income and, because they do not pay federal income taxes, they cannot receive the Earned Income Tax Credit, an important source of support for many low-income working families in the United States.

Economic Profile: Fifty years ago, Puerto Rico was a largely rural island where most people made a living as farmers. Since becoming a commonwealth, Puerto Rico has developed closer economic ties with the United States, with increasing revenue from industry, agriculture, and

tourism. While U.S. median household income increased by 7 percent between 1989 and 1999 (adjusting for inflation), median household income in Puerto Rico increased by 24 percent.

However, income levels in Puerto Rico still lag far behind those in the rest of the United States. In 1999, median household income in Puerto Rico was $14,412. West Virginia's median household income--at $29,696--was the lowest among the 50 states but was still twice as high as the median income in Puerto Rico. The median household income in New Jersey--at $55,146--was the highest of the 50 states and was almost four times higher than the median income in Puerto Rico. Among Hispanic/Latino households in New Jersey, median household income was $39,609, still more than two and a half times the median income in Puerto Rico. The level of poverty declined from 58.9% in 1990 to 48.2% in 2000. On the other hand, the number of families under the poverty threshold level off from 55.3% to 44.6 percent. The economic downturn since 2000 is likely to put an additional strain on the Island's limited resources.

/2008/ According to the 2005 Puerto Rico population estimate, the level of poverty was 44.9 percent. On the other hand, the number of families under the poverty threshold level was 41.1 percent.//2008//

/2007/ For the past year the executive and legislative branch (controlled by the opposing political party) have been attempting to reach a consensus agreement that can solve the financial crisis PR is currently facing. A large budget deficit, increasing government costs and reduced revenues have led to a proposed fiscal and financial reform. In the meantime, government officials have taken drastic steps to reduce government costs. These includes cost containing measures such as hiring freeze, reorganization and consolidation of government agencies, and a drastic reduction in funds available to maintain services at current levels. A reduction in the amount of federal funds made available to PR have made the situation even worse.//2007//

/2008/ Our government continues to adopt measures to deal with PR financial crisis such as hiring freeze, reorganization and consolidation of government agencies.//2008//

/2009/ For the past five decades the PR economic cycles have paralleled those in the US economy. However, in 2005 our economy began a downward spiral and local economists have recognized PR is in a recession. During this period over 100,000 direct and indirect jobs have been lost. In 2007 our economy grew at a negative rate of -1.8%. Experts believe some of the factors that contributed to this downturn are: the repeal of the 936 tax exemption status for investors doing business in PR, increasing fuel costs, increases in charges for basic utilities, the approval of a 7% local consumption tax and a government strongly divided across party line that has interfered with the approval of an economic stimulus package by the PR Legislators.//2009//

Population: Puerto Rico is one of the most densely populated areas of the world. According to the Census Bureau there were 3,808,610 people living in PR in 2000. This represents a population density of over 1,100 people per square mile, similar to the population density of New Jersey which is the most densely populated state. Over 94.4% of the population resides in the urban areas, where an overwhelming concentration of people are found reaching figures close to 10,000 per square mile.

/2008/ According to the 2005 Puerto Rico Community Survey, the total population living in Puerto Rico was 3,912,054.//2008//

General Trends
The population living in Puerto Rico has increased during each decade since the first U.S. census was conducted in 1899. In 1899, there were nearly 1 million people living in Puerto Rico. By 1950 the population had more than doubled, reaching 2.2 million. During the past 30 years, increased migration from Puerto Rico to the U.S. mainland, combined with a decrease in fertility levels, has slowed population growth in the Commonwealth. Between 1970 and 1980, there was an 18

percent increase in the Commonwealth's population, followed by a 10 percent increase during the 1980s and only an 8 percent increase during the 1990s, bringing the total population to 3.8 million. In the United States as a whole, there was a 13 percent increase in the population during the 1990s. (Figure III-1)

The population under age 18 increased from less than 500,000 at the turn of the 20th century to 1.1 million in 1950. The child population increased slightly each decade during the 1950s, '60s, and '70s, but has decreased since then, from 1.2 million in 1980 to 1.1 million in 2000. Therefore, the number of children living in Puerto Rico today is roughly equal to the number of children living there in 1950. Between 1990 and 2000, the number of children in Puerto Rico decreased by 5 percent, compared with a 14 percent increase in the United States. Despite the recent drop in the population under age 18, the number of children in Puerto Rico has more than doubled during the past century.

/2008/ Between 2000 and 2005, the children's population decreased by 5.4%.//20008//

The proportion of children in the population has also declined in recent decades. Between 1899 and 1960, the share of children in the population hovered around 50 percent. But since then, there has been a steady decline in the percentage of children, from 43 percent of the population in 1970 to 29 percent in 2000. This is only slightly higher than the percentage of children in the United States (26 percent) and is lower than the share of children in the nearby U.S. Virgin Islands (32 percent). The long-term decline in the proportion of children in Puerto Rico's population does not reflect a significant decrease in the number of children but rather an increase in the number of adults relative to the child population. (Figure III-2)

The decline in the proportion of the population under age 18 has been driven by two main factors. First, there has been a long-term decline in fertility rates in Puerto Rico. In 1950, the fertility rate in Puerto Rico was 5.2 births per woman. By 1970, it had fallen to 3.2 births per woman, and by 2000 it had dropped to 1.9 births per woman. The 2000 fertility rate in Puerto Rico was slightly lower than the rate in the United States as a whole (2.1 births per woman) and was substantially lower than the rate for U.S. women of Puerto Rico descent (2.6 births per woman). The decline in fertility rates in Puerto Rico during the 1950s and 1960s has been linked to increasing levels of female sterilization during those decades. Other factors, including a rising age at marriage and an increase in the use of oral contraceptives, have contributed to the decline in recent years, but sterilization continues to play a key role. In fact, the estimated percentage of married women in Puerto Rico who have been sterilized --46 percent--is higher than that of any other country for which we have data.

/2008/ According to the Births Certificates the fecundity rate in Puerto Rico continues at 1.9 births per woman for year 2005.//2008//

Second, many young Puerto Ricans and their families have moved to the U.S. mainland in search of greater job opportunities and higher wages. Between 1995 and 2000, the net movement of people age 5 and over from Puerto Rico to the U.S. mainland exceeded 100,000 migrants. This relatively high level of out-migration could contribute to the decline in the number of children in Puerto Rico in two ways--through the migration of children who come to the U.S. mainland with their parents and through the out-migration of people of reproductive age, which reduces the number of potential births that occur on the Island.

Female-Headed Families

Family structure has important implications for children. Children growing up in single-parent families typically do not have access to the economic or human resources available to children growing up in two-parent families. In the United States, the number of single-parent families has risen dramatically over the past three decades, causing considerable concern among policymakers and the public. While local social and cultural norms may influence the situation for children living in single-parent families (for example, they may benefit from extended family

support), children in Puerto Rico growing up in single-parent families are still at an economic disadvantage relative to children growing up in families with both parents present in the household. About 44 percent of married-couple families with children were living in poverty in 1999, while among female-headed families with children, 71 percent were living in poverty. In the United States, about 7 percent of married-couple families with children--and 34 percent of female-headed families with children--were living in poverty in 1999.

/2008/ About 32.6% percent of married-couple families with children under 18 years old were living in poverty in 2005, while among female-headed families with children, 57.8 percent were living in poverty. //2008//

In 2000, about 27 percent of families with children in Puerto Rico were headed by a female householder. This represents an increase over the share of female-headed families with children in 1990 (22 percent) and is higher than the U.S. average. In the United States, the share of female-headed families increased from 20 percent in 1990 to 22 percent in 2000.

The proportion of female-headed families increased in 48 of the 50 states during the 1990s (Colorado and Utah were the exceptions). In the U.S. Virgin Islands, about 46 percent of families with children were headed by a female householder in 2000, up from 37 percent in 1990. These data suggest that the increase in female-headed households in Puerto Rico followed a trend seen throughout the United States.

/2009/ PR ranks 26 in population size when compared to all other states in the USA. Our population almost reaches 4 million (3,927,776). The Puerto Rico population pyramid has a narrowing base, a reflection of the lower percentages of younger people. The percent of the population comprised of children 0-19 continues to decrease, from 32% in 1990 to 28.4% in 2006. We estimate 36% of children under 18 years of age live in a female-headed household with no husband present. It is a culturally accepted norm for grandmothers to assume the care of children when their mothers cannot take care of their children. This is the case for 13.7% of children who are under the care of their grandmothers.

The Puerto Rican population is fairly homogenous. Among PRCS participants, 98.7% responded they considered themselves Hispanic and only 2.9% were foreign born.//2009//

Poverty
In 1999, more than half of the children in Puerto Rico--58 percent--lived in families with incomes below the poverty line. Puerto Rico's child poverty rate was over three times higher than the child poverty rate in the United States (16 percent). American Samoa--at 67 percent--was the only U.S. state, territory or commonwealth with a higher child poverty rate than Puerto Rico in 1999.

Although poverty levels in Puerto Rico are still quite high, they declined significantly during the 1990s--a period of unprecedented economic growth in the United States. Between 1989 and 1999, the number of children in Puerto Rico living in families with incomes below the poverty line decreased by 18 percent, from 761,789 to 626,521. The percentage of children living in poor families also decreased, from 67 percent in 1989 to 58 percent in 1999. In the United States, the child poverty rate dropped from 18 percent to 16 percent during the 1990s.

The number of families living below the poverty line also declined, from 492,025 in 1989 to 450,254 in 1999. However, the number of female-headed families living in poverty increased by 12 percent, from 142,737 in 1989 to 159,205 in 1999. In 1999, the median income for female-headed families with children in Puerto Rico was $6,888, compared with $20,284 in the United States.

/2008/ The number of families living below the poverty line also declined, from 450,254 in 1999 to 393,315 in 2005. Nevertheless, the number of female-headed families living in poverty increased to 170,518 for the same year. //2008//

/2009/ The Puerto Rico Community Survey (PRCS) is a nationwide survey designed to provide communities information on the changes they are experiencing. It is an ongoing survey that allows the Census Bureau to provide the nation with demographic data on a yearly basis instead of every 10 years. The PRCS is sent to a small percentage of the population on a rotating basis and helps inform decisions on policies, programs and services for communities. Its 2006 data confirms the economic difficulties children living in PR and their families face. It reports Puerto Rico ranks #1 in the nation in percent of children under 18 years below poverty level in the past 12 months (for whom poverty status is determined). The PR rate has increased from 54.7% in 2005 to 56.3%, which compares unfavorably with the national rate of 18.3%. The PRCS also reports 39.9% of children live in households that received public assistance in the past 12 months, such as cash public assistance income or Food Stamp benefits.

In 2006, 45% of people were in poverty. The median household income in the past 12 months (in 2006 inflation adjusted dollars) was $17,621, a slight increase from its 2005 level of $17,184. That same year the per capita income in 2006 inflation adjusted dollars was $9,474. Forty-two percent of all families and 60% of families with a female householder and no husband present had incomes below the poverty level.//2009//

Education: According to the Census Bureau the illiteracy rate in 1990 was close to 10% (data is not available for 2000). This proportion of analphabetisms is unacceptable in PR, if we consider the high number of public and private schools available in the Island. In 2004-2005, there were 1,528 public and 672 private schools. The number of students enrolled in the public education system was 575,387 and 133,637 in the private system. It is important to highlight that the number of students has been consistently declining during the last decade. In 2000-2001, the number of students in the public system was 612,024 vs. 575,387 in 2004-2005 (<6%).

In addition to the primary and secondary education system is the higher education system. Over 55 institutions of higher education have been established in PR since 1980. These include four Schools of Medicine; the University of PR School of Medicine which includes the School of Public Health and three private School of Medicine located in Bayamon, Caguas and Ponce. These schools provide a wide array of degrees of health professionals in addition to MD's, Dentists and nurses.

High School Dropouts
During the past 50 years, Puerto Rico experienced a relatively rapid shift from small-scale agricultural production to an industrial and service-oriented economy. This transformation has led to a growing demand for educated workers with high school, college, and postgraduate degrees. In Puerto Rico, as in the United States, a high school diploma is a critical prerequisite for many entry-level jobs as well as for higher education. However, many young adults in Puerto Rico do not graduate from high school. In 2000, about 14 percent of 16-to-19-year-olds in Puerto Rico were high school dropouts (not enrolled in school and non high school graduates). The high school dropout rate in Puerto Rico was relatively high compared with most states--exceeded only by Arizona (15 percent) and Nevada (16 percent). In the United States as a whole, about 10 percent of 16-to-19-year-olds were high school dropouts in 2000. Currently, it is estimated that nearly 40% of children who begin the first grade will desert from school before they reach the 12th grade.

/2008/ According to the 2005 Puerto Rico Community Survey, 11 percent of 16-to-19-year-olds in Puerto Rico were high school dropouts (not enrolled in school and non high school graduates).//2008//

However, even though the dropout rate in Puerto Rico remains relatively high, there has been considerable improvement in this measure since 1990, when 22 percent of 16-to-19-year-olds were not enrolled in school and not high school graduates. It is important to highlight that in the

case of females, pregnancy is the most common cause for school dropout.

/2009/ The PRCS states that in 2006, 66% of people 25 years and over had at least graduated from high school; of these, 21% had a bachelor's degree or higher. Thirty-four percent were dropouts; they were not enrolled in school and had not graduated from high school.

The total school enrollment in Puerto Rico was 1.1 million in 2006. Nursery school and kindergarten enrollment was 114,000 and elementary or high school enrollment was 735,000 children. College or graduate school enrollment was 270,000.//2009//

The Need for Child Care

In this report, the need for child care is measured as the percentage of children under age 6 living in families where all of the parents in the household reported being in the labor force during the week before the survey. For children living in single-parent families, this means that the resident parent was in the labor force; for children living in married-couple families, this means that both parents were in the labor force.

Based on this definition, the need for child care is lower in Puerto Rico than it is in the United States. However, it is not clear from these census data whether the need for child care is low because women are not entering the labor force or whether women are not motivated to seek work because there are so few child care options available to them. In addition, it is likely that some women who are "not in the labor force" are working in the informal sector, providing domestic services or involved in other work outside of the formal labor force. Puerto Rico has a relatively large informal or underground economy, consisting mainly of self-employed workers--especially women. The informal sector includes many domestic services (cooking, cleaning, sewing) as well as more formal services, such as catering and child care services.

In Puerto Rico, 40 percent of children under age 6 lived in families where all of the resident parents were in the labor force in 2000, compared with 59 percent in the United States as a whole, and 69 percent in the U.S. Virgin Islands. The relatively low percentage of children in need of child care is associated with the low percentage of women who are in the labor force. In Puerto Rico, about one-third (34 percent) of women ages 16 and over were in the labor force in 2000, compared with 58 percent in the United States as a whole.

In Puerto Rico, as elsewhere, it is common for grandparents to provide child care while parents are working, and in many households, grandparents are the primary caregivers for young children. For the 2000 Census, the U.S. Census Bureau added a new question to measure the extent to which grandparents provided care to their grandchildren. In Puerto Rico, there were 133,881 grandparents who lived with their grandchildren in 2000, and about 53 percent reported that they were "responsible for most of the basic needs" of one or more of their co-resident grandchildren. This shows the importance of extended family members--particularly grandparents--as caregivers in the Commonwealth. In the United States, only 42 percent of grandparents who lived with their grandchildren reported being responsible for their care. (Reference: Children in PR: Results from 2000 Census. Kids Count, Annie E. Casey Foundation and the Population Reference Bureau, August 2003).

/2008/ In Puerto Rico, there were 131,355 grandparents who lived with their grandchildren in 2005, and about 50 percent reported that they were "responsible for most of the basic needs" of one or more of their co-resident grandchildren. In the United States, only 43 percent of grandparents who lived with their grandchildren reported being responsible for their care. (Reference: US Census Bureau, 2005 American Community Survey, Selected Social Characteristics in US and Puerto Rico). //2008//

Summary
There was an increase of 7.5% in the total population reported in 2000 as compared to 1990. Nearly fifty-two percent (51.9%) of the population was comprised of females and 48.1% of males. The segment of children and adolescents between 0-19 years of age represented 32% of the total. The MCH population comprised by children and adolescents (0-19 years) and women 20-44 years of age surpassed fifty percent (50.5%) of the total population in the Island. On the other hand, the proportion of persons over 65 years of age reached 11.2% (425,137). The median age was 32.1 years, compared to 28.4 in 1990. The average family size was 3.1 persons. The population of female householders with no husband present was 21.3% compared to 23% in 1990. Among this group, 49% (131,854) of them had children less than 18 years of age under their custody.

/2008/ For 2005, more than fifty-two percent (52.3%) of the population was comprised of females and 47.7% of males. The median age was 34.4 years, compared to 32.1 years in 2000. The average family size was 3.5 persons.//2008//

According to the 2000 Census, the economic profile of individuals and families significantly improved during the last decade. The level of poverty declined from 58.9% to 48.2%, and the number of families under the poverty threshold leveled off from 55.3% to 44.6%.

The per capita income increased from $4,177 to $6,809 (63%). The mean income by household increased from $8,695 to $11,989 (34.9%) and the individual mean income grew from $5,721 to $10,403; an increase of 81.8%.

A variable not investigated in 1990 is one related with grandparents living with children under 18 years of age. A total of 133,881 grandparents lived in the same household with children under 18 years old. Among these, 52.5% were the main provider for their grandchildren. This situation should be studied in order to understand the reasons and the implications for children and grandparents.

Other indicators of the PR's economic profile are the unemployment rate, number of participants in the Nutritional Assistance and TANF programs, and the number of individuals holding the GIP. As mentioned elsewhere, in 2000 the Census Bureau reported 3,808,610 persons and 1,261,325 families residing in the Island.

The unemployment rate increased from 10.5% in February 2000 to 13.7% in February 2002. This represents an increase of 23.4%. Among adolescents and young adults unemployment is even higher, creating a fertile environment for criminal activities and other social problems. It is important to underscore, that in spite of the upward trend in the unemployment rate, there is a downward trend in the number of families and persons participants of the Food Stamp and TANF programs.

/2008/ The unemployment rate increased from 13.7% in 2002 to 15.2% in 2005. This represents an increase of 10.9%. Data from 2005 Puerto Rico Community Survey revealed that for the employed population 16 years and older, the leading industries in Puerto Rico were educational services, health care and social assistance, 21 percent, and retail trade, 13 percent. //2008//

/2009/ Unemployment continues to increase. It has been rising from 10.5% in 2000 to 15.7% in 2006.//2009//

In FY 2004-2005, the average number of beneficiaries participating of the Nutritional Assistance program on any given month was 1,047,267 persons and 457,618 families. These figures represent 25.7% and 36.3% of all individuals and families in PR as reported by the 2000 Census Bureau. It is important to highlight that in 1992, the total number of participants of the Food Stamp program was 1,480,457. A decline of 29% is observed in the number of the participants of Food Stamp program in spite of the increase in the population during a period of 13 years.

/2008/ In FY 2005-2006, the average number of beneficiaries participating of the Nutritional Assistance program on any given month was 1,062,967 persons and 478,774 families. //2008//

In 1998-99, there were 76,146 families and 153,427 individuals enrolled the TANF program. During current year (2004-05), the number of participant families declined to an average of 56,680 and 85,110 persons per month. These figures tell us that the number of participant families in the TANF program has decreased by 27.5% in a 6-year's period. Among all families 15,930 of them have children under 18 years old for a total of 30,977. It is unclear if delinked families and individuals from the TANF program are self-sufficient or simply it is the result to be in compliance with administrative procedures required by federal mandates.

/2008/ During current year (2005-06), the number of participant families enrolled in the TANF Program increased to an average of 78,245 and a decrease of 81,857 persons per month was observed.//2008//

These downward trends in the number of families and persons participants of the Food Stamp and TANF programs would be the results of the implementation of the PR Welfare Reform Act (PRWORA) and not necessarily it reflects an improvement of the socioeconomic status of the population.

Race and Ethnicity: The 2000 Census was the first census in Puerto Rico since 1950 to include questions about race or ethnicity. For people in Puerto Rico, as well as Hispanics/Latinos living in the United States, "race is a flexible concept". This is evident in a comparison of race responses between people living in Puerto Rico and Puerto Ricans living in the United States. Although the groups share the same heritage, they have very different ideas about racial identity. About 81 percent of people in Puerto Rico identified themselves as white in the 2000 Census, but Puerto Ricans residing in the United States were almost equally likely to say they were white (46 percent) as "some other race" (47 percent).

The most significant ethnic groups residing on the Island are Dominicans and Cubans. Most Dominicans are concentrated in the metropolitan areas close to San Juan. A significant number of Dominicans are undocumented. In 1998, the U.S. Immigration Agency reported 7,540 new lawful permanent residents' aliens and approximately 37,700 illegal residents in the Island. Puerto Ricans, Dominicans and Cubans have a Hispanic background. Spanish is the official language of the Government of Puerto Rico. In addition, a significant proportion of Puerto Ricans can also communicate in English quite well.

The 2000 Census revealed the following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% were Asian, Native Hawaiian and other Pacific Islander. Interestingly, according to the Census, 84 percent of the population residing in the Island was White, 10.9% Black and 9.6% some other race.

Vital Events 2003
Births: Figure III-3 depicts the vital events registered in PR in 2003. In 2003, the estimated population was 3,878,531. A total of 50,803 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants as compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the C/S rate reached 46%.

/2007/ Vital Events 2004
Births: Figure III-3 depicts the vital events registered in PR in 2004. In 2004, the estimated population was 3,894,855. A total of 51,239 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants, compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the C/S rate has remained steady at

48% for the past two years.//2007//

/2008/ Vital Events 2005
Births. Figure III-3 depicts the vital events registered in PR in 2005. In 2005, the estimated population was 3,912,054. A total of 50,687 live births were registered; 99.9% occurred in hospitals. Only 11 live births occurred at home and other places. The natality rate was 13.1/1,000 inhabitants as compared to 15.6/1,000 in 2000. These figures represent a decline of 19.1% in the crude natality rate in PR. On the other hand, the C/S rate has remained steady at 48% for the past three years. //2008//

/2009/ Vital Events 2006
Births: Figure III-3 depicts the demographic and vital events data registered in PR in 2006. In 2006, the estimated population was 3,927,776. A total of 48,744 live births were registered; 99.9% occurred in hospitals. Only 63 (.1%) live births occurred at home and other places. The natality rate was 12.4/1,000 inhabitants, compared to 18.9/1,000 in 1990. These figures represent a decline of 30.7% in the crude natality rate in PR. On the other hand, the preliminary C/S rate experienced a slight increase reaching 48.3%.//2009//

Marriages and Divorces: The rate of marriages was 6.6/1,000 inhabitants and divorces occurred at a rate of 3.8/1,000 inhabitants.

/2007/ The rate of marriages was 7.8/1,000 inhabitants and divorces occurred at a rate of 5.0/1,000 inhabitants.//2007//

General Mortality: Total deaths amounted to 28,356, a rate 7.3/1,000 persons. The ten leading causes of death were: (1) Heart Diseases; (2) Cancer; (3) Diabetes; (4) Hypertension; (5) Chronic Pulmonary Diseases; (6) Alzheimer; (7) All Accidents; (8) Pneumonia and Influenza; (9) Cardiovascular Diseases; and (10) Nephritis and Nephrosis.

/2008/ General Mortality: Total deaths amounted to 29,709 in 2005, a rate 7.7/1,000 persons. //2008//

Infant Mortality: Figure III-4 illustrates the downward tendency of the infant mortality rate (IMR) in PR from 1990 to 2000. During a ten-year period the IMR declined 26.1%. However, from 2000 to 2003 it has dropped only 1.1%; from 9.9 to 9.8 per thousand live births.

/2007/ The downward tendency of the infant mortality rate continues. The IMR for 2004 was 8.1/1,000 live births.//2007//

/2008/ Infant Mortality: Figure III-4 illustrates a stable tendency of the infant mortality rate (IMR) in PR from 2000 to 2005. The IMR was 9.3 for the year 2005. //2008//

/2009/ The infant mortality rate showed a slight decrease reaching 8.7/1,000 live births (see Figure III-4).//2009//

An attachment is included in this section.

B. Agency Capacity

The health care delivery environment has been evolving during the last decade in the Commonwealth of PR as a result of the implementation of a Health Care Reform (HCR). Therefore, an understanding of the changes that are occurring in the Health Care System (HCS) of PR is important to providing the context of the MCH/CSHCN programs priorities and activities.

In this section we pretend to provide the reviewers of this application a synopsis of the traditional

HCS of the Commonwealth of PR; and the reasons behind its reformation into a privatized managed care model of health services.

Traditionally, the HCS in PR was divided into two parallel systems, public and private sectors. The public sector was responsible for addressing all health care needs for almost 60% of the population with low-income or uninsured. On the other hand, the private sector served 42% of the population who could paid out of pocket or through third party payers.

The PRDoH historically functioned as the predominant provider of personal health services for low-income and uninsured populations. It operated through an extensive regionalized network of level one primary health care centers, at least one in each municipality; areas' hospitals (level II); regional hospitals (level III); and a Supra-tertiary Center, located at the PR Medical Center. However, in spite of this extraordinary network of facilities the PRDoH had to place restrictions on the scope of services available and compliance with the schedule of preventive services for low-income and uninsured populations. The HCS had a chronic limitation of trained health care providers and ancillary services such as laboratories, X-rays and pharmacy services, due to insufficient allocation of funds. There were both limited allocation of funds from the Commonwealth revenue and due to the cap in the Medicaid funds imposed to PR as well to other territories. Another limitation was that patients, who could paid for their services did not come to our system, except those with catastrophic illness referred by their physicians.

Over the years, PR's Medicaid program only paid for hospital-based services, including in-patient and outpatient care for categorically and medically needy persons. Because of this, Title V funds were used as the first payor for ambulatory care services for women in their reproductive age (family planning, prenatal and postpartum services), preventive services for children and specialized for CSHCN.

As earlier mentioned, the traditional HCS had primary health care facilities at each one of the municipalities. This was the portal of entry into the HCS for the low-income and uninsured MCH population groups. However, the reality was that primary centers were very under staff. In addition, the majority of the primary providers for women in their reproductive age, infants and children were general physicians who were untrained to address the needs of the high proportion of the at risk MCH population. Besides, they were insufficient in number to serve all the population of the municipality in need of services, including emergency services.

High-risk pregnant women and children were referred to Regional Hospitals for follow-up. Most of the times this was worse for the patient because of the distance they had to travel from their residency to the Regional Hospital for an appointment. As an example, a high-risk pregnant women living in Orocovis had to travel about 38 miles (one trip) in public transportation to reach the high-risk prenatal clinic based at the Bayamon Regional Hospital. In addition, due to the limitation of staff at Regional Hospitals and the high number of referrals the follow-up was not given according to the patient's condition. Other reasons for referrals to Regional Hospital were for laboratory and X-rays services. Children with special conditions ran the same luck as their mothers.

On the other hand, the segment of the population with private insurance or who could pay out of pocket (42%) had a private health care system with access to primary providers, specialists, laboratories, x-rays services, pharmacies and in hospital services at their community level or the nearest municipality to their residency.

In pursuing to eliminate or reduce the disparities in the accessibility and quality of health services provided to the low-income and uninsured population (+ 60%), an aggressive HCR was launched in PR about one decade ago. The HCR driving values are justice and equity for the low-income population in addressing their health services needs. The HCR is an initiative comprised by three main components. These include, (1) a Government Insurance Plan; (2) renting or selling its public health facilities; and (3) enhancing its role in performing the core functions of public health

(assessment, policy development and assurance).

The HCR is mandated by Law No. 72 enacted on September 7, 1993. The HCR attempts to bridge the gaps in services between the public and private sectors through a Government Insurance Plan (GIP). At the same time, one of its goals was to privatize the public health care system through renting or selling its facilities. In addition, the DoH is expected to enhance its role in performing the core functions of public health following the recommendations of the State and Territorial Health Officials (ASTHO): assessment, policy development and assurance. As a result of the implementation of the HCR, the DoH instituted as its top priority the promotion and protection of health.

The initiative of the HCR was based in several basic principles. These are to:

1.Eliminate the public and private sector disparity and discrimination in health care;
2.Guarantee access to quality health care to all residents;
3.Have freedom for selection of a primary health care provider;
4.Increase the efficiency and productivity of the health care industry through a competitive mechanisms;
5.Improve the quality of services;
6.Modify the role of the government in the areas of health promotion, and disease prevention; since participants have the option of selecting the health care site and provider. These principles enhance and guarantee universal access to adequate health care services.

Who benefits from the Government Insurance Plan?
*Medicaid Beneficiaries up to 200%
*Veterans (Non-Service Connected)
*Medicare Beneficiaries (Part A and B)
*Police Officers and their families
*Public Employees and their direct dependents.

The GIP has three primary objectives. These are: (1) Universal coverage; (2) Freedom of choice; and (3) Expanded benefit package.

The privatization effort is administered by a nonprofit corporation called the "Administracion of Servicios de Salud" (ASES, Spanish acronym). This organization was created in 1993 under PR Law 72 and is responsible for a number of critical administrative activities, including:

*Negotiating contracts. ASES is responsible for negotiating and awarding contracts to private insurers to provide services included in the ASES standard benefit package on either a fully- or partially-capitated basis through managed care systems.

*Conducting quality assurance. ASES monitors managed care plans by requiring the monthly submission of service utilization data. Reimbursement of the health plans is contingent upon the submission of these reports. In addition, ASES is bolstering its monitoring activities through contracts with a number of organizations; a Peer Review Organization (PRO) is assessing the quality of ambulatory care services, PRDoH is monitoring hospital service quality, and other groups are monitoring regional activities.

*Facilitating enrollment. ASES is responsible for enrolling eligible persons into the new system and coordinates eligibility determination activities with PRDoH. PRDoH Medicaid certification staff stationed at primary care centers determine which clients are eligible for the program and forward this information to ASES. ASES, in turn, provides contracted insurers with the names and addresses of eligible persons so that they can send them letters informing them of their eligibility and inviting them to enroll with a managed care provider in their community. Each enrollee receives a health insurance card which gives him or her access to health care services.

In February 1994, the Commonwealth of PR began the implementation of the aggressive HCR initiative mandated by Law 72, 2003. This led to the replacement of the extensive public health infrastructure that traditionally served low-income and uninsured residents in Puerto Rico. The public health service delivery system was incrementally privatized by June 2000. Under this reformed system, responsibility for providing personal health services to low-income and uninsured populations holding the GIP was transferred from the DoH to the private sector. Currently, all care is delivered through a managed care service delivery model.

/2008/ The law 72 mandating the implementation of the HCR was enacted in 1993.//2008//

The second component of the privatization process was the sale of the public health facilities. The Government had to amend State Law 31, which expedites and facilitates the sale of government owned DTC's and hospitals. The facilities were sold to private for profit and nonprofit organizations. The first request for proposal was announced in May 1997. As of June 2000, the DoH had sold 50 health facilities, including 8 hospitals. Other 10 facilities were rented or administered by the DoH. This component of the HCR was discontinued in 2001.

After the completion of the implementation of the GIP in July 2000, several laws and changes have been established. These include, but are not limited to:

*Enactment of Law No. 194, August 2000. This law requires the establishment of an agency to advocate for the rights of patients holding the GIP.

*Enactment of Law 408 of 2000. The PRDH is retaking the primary responsibility for the provision and coordination of mental health services for the population enrolled in the GIP.

*Pilot project for the implementation of the Intelligent Card. This is an electronic card which contains sociodemographic data, relevant information regarding the health history of the patient, medications and other information.

*Establishment of 14 Clinical Guidelines including Perinatal Services, EPSDT, Guidelines for the management of pediatric patients with asthma and diabetes.

*The Department of Health assumed the primary responsibility for immunization services after June 2002.

*Increase the length of the contract between ASES and the Health Insurance Company to at least 3 years. The three health insurance companies that are providing the services for the population with the GIP are MCS, Triple S and Humana.

/2008/ The health insurance companies that are providing services for the population for the GIP are MCS, Triple S, Humana and Cosvi.//2008//

Other changes under consideration are to: 1) Readjust the HCR areas to traditional Health Insurance regions; and 2) Contract directly with HMO providers. In July 19, 2002, Law No. 105 empowered Puerto Rico Health Insurance Administration (PRHIA) to conduct demonstration projects of contracting directly with providers, without intermediaries such as managed care organizations. The Demonstration Project began operations on July 1, 2003 with Alianza de Medicos del Sureste, Inc. (AMSE) as a sole provider assuming risks under the basic coverage. A second contract was negotiated with the Family Medicine Group on March 1, 2004. For this second group the Division of Education and Social Communication of the Secretariat for Health Promotion of the Department of Health provides prevention and education services under contract.

The PRHIA is also implementing what is called the "intelligent card", a pocket size card with a microchip that stores the subscriber's medical history including: personal data, diagnosis and

medications, last five physician, hospital and emergency room visits, immunization history and more. As of April 2004 a total of sixteen thousand intelligent cards (16,000) had been distributed in the municipalities of Bayamon (4,000), Isabela (7,000) and Vieques (5,000). This is an initiative toward better access and quality of services since it offers electronic retrieval of all the necessary medical information to providers. The 1.5 plus million health care reform patients in Puerto Rico will eventually have an intelligent card. As of December 2004, the total number of beneficiaries was 1,521,981. Among these, 55.16% were WCBA, infants, children and adolescents.

/2007/ Discontinued due to lack of funding.//2007//

Satisfaction with the GIP: Studies and surveys conducted by the "Administracion de Seguros de Salud de Puerto Rico" (ASES) or the Puerto Rico Health Insurance Administration, show a high percentage of satisfaction among the clientele. Close to nine out of 10 (87.8%) of those interviewed reported being satisfied with the new service system. This finding is encouraging, because it is the best index of the success of HCR as a social justice project.

Among the reasons given by beneficiaries to preferring the new system in contrast to the traditional system are:

1.The Government Insurance Plan (GIP) is better than the services we had before.
2.The availability of more and better services.
3.There is more accessibility to medications and better pharmacy services.
4.There is better attention at the health service centers.
5.Services are free or require low co-payment.

The third component of the HCR is the transformation of the Department of Health from a disease-oriented agency to one that encourages health promotion and protection programs and primary, secondary and tertiary prevention programs within the context of a comprehensive continuum of public health services.

/2009/ HIC provide preventive and primary care services. ASES is negotiating a new 3 year contract with them.//2009//

State Health Agency's Current Priorities or Initiatives: In addition to the GIP, which is mainly implemented by ASES, and as a result of the HCR, the Department of Health has modified its role and approaches in pursuing the optimal health of the population. The Department of Health has been emphasizing in the core functions of public health that include needs assessment, policy development and assurance. It has also modified its role of a disease-oriented agency towards one of health promotion, disease prevention and health protection of the population at large.

A Strategic Action Plan has been developed which is divided into three major phases: planning, implementation and evaluation. A variety of initiatives or programs have already been implemented to address the health needs of the population at large or to segments of the population with special needs. These initiatives include, but are not limited to:

* The Healthy Community Division of the Secretariat for Health Promotion - The mission of the program is to promote healthy lifestyles and behaviors of the diverse population groups in order to decrease mortality and morbidity due to chronic health conditions. The strategy to develop this concept and reach its goal involves a comprehensive health risk appraisal as well as an assessment of the needs and capacities of the participating communities. Challenges and opportunities to improve the health of the community are identified. Beginning with the mayor of the municipality, all community leaders are brought to the table to design a concerted action plan to address identified health needs. The Healthy Community Division has been implemented in 16 municipalities. In each of these Healthy Communities several health promotion and disease prevention programs are implemented in response to its specific needs and the available

resources.

* The Behavioral Risk Factors Survey, which is a national CDC-sponsored cross-sectional yearly study designed to identify health trends, lifestyles and behaviors among Puerto Ricans. Four questions addressed to identifying asthma morbidity were added this year.

/2007/ BRFSS now includes 17 questions on child, adult and work related asthma. Information will be included in the Asthma Surveillance System Report.//2007//

/2009/ BRFSS will now include a Folic Acid module.//2009//

* The HIV Prevention Needs Assessment, an Island wide study of a large sample of high-risk populations. The purpose of the study is to identify the health needs of these groups. The results are used to design custom-made HIV/AIDS/STD primary and secondary prevention programs.

* The Basic Sample Survey -This is an annual representative probabilistic survey of approximately 3,000 personal interviews that looks for sociodemographic characteristics, service utilization, prevalence of health conditions and the reasons for work absenteeism, including hospitalization and ambulatory conditions.

/2007/ Discontinued due to lack of funding.//2007//

Among the programs that contribute to address specific MCH needs are:

* The Distance Learning (An Interactive Education program) - To educate and train private and public health professionals through nine transmission centers located at regional hospitals Island wide by means of telecommunications.

/2007/ Discontinued due to lack of funding.//2007//

* Rape Victim Centers - The opening of four centers to assist rape victims ("Centro de Ayuda a Victimas de Violacion") and the expansion of services to assist domestic violence victims across the Island.

/2009/ Six Rape Victim Centers offer psychological help to victims and assist them with medical, legal and social issues. They educate the public, PCPs, distribute rape kits to ERs and have a 24 hr hotline.//2009//

* The Oral Health Prevention Program - Under the Health Care Reform, oral health services are included in the benefit package. Patients are not required to obtain a referral to get oral health services. They can access oral health whenever they want and with their preferred dentist. In addition, the Division for Oral Health has a very active prevention program throughout the Island.

/2009/ The Dental School established a clinic to treat pregnant women and children. They provide hands-on training to dentists to improve their clinical skills. A Dental Home project is providing services in one poor and underserved SJ community.//2009//

* The Immunization Program - The Puerto Rico Government established compliance with the Hepatitis B vaccination as a requirement for school admission, for those born from 1991 on, and those who are 13 years of age. Since 2000, all adolescents from 13 to 18 must be immunized against Hepatitis B. Puerto Rico has achieved high immunization rate in children through 2 years. Puerto Rico had been the jurisdiction with the highest percent of immunized children in the nation for three consecutive years. However, a marked decline in the proportion of immunized children 24 month old was observed as a result of the vaccine shortage occurred in the nation in 2002. Currently, we have achieved again levels over 90% of immunized children.

/2008/ Results from the latest study (2005) revealed that the immunization coverage in PR has increased to 94.5%. A new study is underway to determine coverage in 2007. The vaccine schedule has been modified to recommend 3 new vaccines (rotavirus, meningococcal and HPV). The MCH Division will continue collaborating with the PR Immunization Program. //2008//

/2009/ A workgroup has been convened to address the reduction in the number of providers and sites available to immunize privately insured children.//2009//

The Welfare Reform: We understand that the Welfare reform has not negatively affected the access to health care services of the low-income population. As mentioned elsewhere, one of the three components of the initiative of the HCR consists of a GIP for persons under 200% of the FPL. The GIP is paid mostly with state funds (84.7%). Medicaid funds represent only 12.1% of the total budget used to buy the GIP in PR. Over 1.5 million persons hold the GIP. This figure represents almost 40% of the total population residing in PR.

/2008/ The GIP is paid mostly with state funds (84.6%). Medicaid funds represent only 12.4% of the total budget used to buy the GIP in PR. Over 1.3 million persons hold the GIP. This represents almost 40% of the total population residing in PR. //2008//

Puerto Rico CHIP Program: The PR CHIP plan was approved in June 1998. It started with an allocation of 9.8 millions. In 2004-2005, a total amount of 42.3 millions were used to contribute to buy a GIP for children who qualify for the CHIP program. It is estimated that the CHIP monies may be used to pay the GIP of about 50,000 children; considering the current annual premium of $862.00 per person.

/2008/ PR SCHIP Program: In 2005-2006, a total amount of 41.1 millions were used to contribute to buy a GIP for children who qualify for the SCHIP program. It is estimated that the SCHIP monies may be used to pay the GIP of about 43,169 children; considering the current annual premium of $952.08 per person. //2008//

The total population holding the GIP is 1,521,981. This figure includes 383,438 women in their reproductive age and 455,497 children aged 1-19 years. As of September 2004, the network of health care providers available to serve the low income population was the following: 410 OB/GYN's, 570 pediatricians, 210 family physicians, 1,062 GP's, 410 internists and 1,289 dentists.

/2008/ The total population holding the GIP is 1,373,934. This represents 409,386 women in their reproductive age and 440,083 children aged 1-19 years.//2008//

/2009/ The Licensing Board reports MDs, pediatricians and OBs have increased in number.//2009//

Current MCH Priorities and Initiatives: As already described, in 1994, the Government of Puerto Rico began implementing an aggressive HCR, under which the public service delivery system was incrementally privatized in all the island's health regions. Under the reformed system, responsibility for providing personal health services to low income and under-insured populations was transferred from the public to the private sector and all care is delivered through managed care service delivery models. The Reform was first implemented in the sub-region of Fajardo and moved very quickly to other areas. Currently, the HCR is implemented Island wide.

The reformed system replaced an extensive public health infrastructure that traditionally served low income and uninsured residents of Puerto Rico. The PRDH historically functioned as the predominant provider of personal health services for these populations, operating an extensive network of primary care diagnostic and treatment centers (86) and hospitals (9) reaching all corners of the Island.

The PRDH delegated the provision of direct care services to the private sector, through contracts with health insurers, while maintaining the non-delegable core functions of public health. These functions include needs assessment, policy development, assurance and training of health professionals. The Department of Health also retained the administration of certain federal programs and special services such as the WIC program, Medicaid, services for persons with AIDS and the MCH program, among others.

Considering the above context and the mandates of Title V, the MCH role was refocused to assure, at this time of transition, that the most vulnerable population does not fall through the cracks of the evolving system. The MCH struggles to enable women, infants, children, adolescents and CSHCN to receive high quality and comprehensive services across a system that is now more complicated. Responding to this need, two (2) new core programs were designed and incrementally implemented across the Island. One is the Home Visiting Program that serves pregnant women and children less than 2 years of age with multiple social and health risk factors through a case management care/coordination model. The other one is the Community Outreach program. Community outreach workers' main responsibilities are to identify pregnant women and children delinked from the HCS and to facilitate their enrollment into the GIP, coordinate inter-agency services and give follow-up to certain situations of the Home Visiting program's clients.

/2007/ As a result of the Health Care Reform, families struggle to obtain referrals to the Pediatric Centers for specialized services.//2007//

/2008/ The CSHCN Program is encouraging family participation in the CSHCN Committee to discuss family needs and concerns with ASES. Collaboration with ECCS is in place to increase the number of medical homes for all children, including CSHCN. //2008//

/2009/ Difficulties obtaining referrals is still an access barrier for specialized services and had led to a decrease in number of CSHCN served in PC. Initiatives are currently underway with the Secretary of Health, ASES and Humana to develop a pilot project to promote the implementation of medical homes for CSHCN.//2009//

Most important, as an aftermath of the delegation of the provision of direct services to the private sector, has enabled the MCH/CSHCN programs to dedicate more time and resources to the development and implementation of infrastructure building activities. These activities include creating partnerships, monitoring and evaluation, empowering communities, promoting healthy behaviors, building capacity, and advocating for supporting policies. Among these infrastructure building activities it is important to highlight the followings:

-Healthy Start Consortium / MCH Advisory Board: It is a multidisciplinary and intersectorial group of professionals and representatives of the MCH population. They are very committed and knowledgeable of MCH issues. The Advisory Board has been a fundamental piece in providing input regarding new priorities and strategies to address the needs of the MCH population within the emerging new health care environment. Most of their recommended strategies are integrated in the action plan aimed at improving the health and well being of the MCH population including CSHCN.

-Breastfeeding Steering Committee: This committee is comprised by a wide array of stakeholders committed with the promotion of this important behavior aimed at enhancing the growth and development of children.

/2009/ Preconceptional Health Committee: It is developing a pilot project to improve the interconceptional health of Diabetic women.

Fetal Infant Mortality Review: The FIMR will allow a Review Team to review de-identified comprehensive information of infants who died in order to identify system related risk

factors that can be addressed.

Regional Boards: They are the result of reinforcing SSDI regional boards with representatives of the ECCS State Team. They address barriers and problems related to the health care system at the regional level. Their input is included in the MCH needs assessment.

ABCD Screening Academy Award: It is helping implement a MH pilot project. ASES is providing PCPs with incentives. One of its key components is the use of a formal developmental screening tool.

ECCS is collaborating with municipal governments to establish Early Childhood Clearinghouses in their facilities. They will disseminate health prevention and promotion messages and information on available local services.//2009//

-Puerto Rico's Safe Kids Coalition: This is a non-profit multisectorial organization. Its goal is to reduce unintentional injuries among children and adolescents.

-Asthma Coalition: The Asthma Coalition was incorporated as an organization comprised by public organizations, private entities, academia and parents. Its goal is to reduce morbi-mortality rates due to asthma. The coalition holds monthly meetings.

/2007/ The Asthma Coalition has developed the PR State Plan and the Surveillance System. The Coalition has identified the need to train physicians in NIH Guidelines in order to decrease asthma morbidity.//2007//

/2009/ The first Epidemiological asthma profile was updated.//2009//

-Title V Monitoring and Evaluation Section: This section monitors all national and state performance measures, evaluate outcome measures and support the MCH needs assessment process. It entails several ongoing activities such as the implementation of the SSDI action plan; a customized PRAMS of recent mothers conducted every other year; an Infant Mortality Epidemiological Surveillance System (SIVEMI, Spanish acronym); a Maternal Mortality Surveillance System; Integrated Index of MCH status by Municipality; one State SSDI Conference every other year and special applied studies aimed at increasing the knowledge on selected MCH problems.

/2009/ Recognizing the importance of having culturally sensitive programs, MCH has rehired an anthropologist to conduct qualitative studies on obesity, PTB and teen pregnancy.//2009//

-Birth Defect Registry: Currently this registry monitor the prevalence of 13 categories of birth defects; NTD's, cleft lip/palate, Down Syndrome, gastroschisis, limb defects, ambiguous genitalia, Trisomy 13, 18, albinisms, congenital heart defects and others.

/2007/ The Birth Defect Registry is now the Birth Defects Surveillance System. It monitors 38 birth defect diagnoses in all birthing hospitals.//2007//

/2008/ The BDSS currently monitors the occurrence of 7 categories of birth defects: central nervous system, orofacial, musculoskeletal, genitourinary, chromosome, cardiovascular and other. These categories account for a total of 43 birth defects, which includes: NTD's, cleft lip/palate, gastroschisis, limb defects, omphalocele, talipes equinovarus, ambiguous genitalia, Trisomy 13, 18 and 21, albinism, congenital heart defects, Jarcho-Levin syndrome, hypos/epispadias, and conjoined twins. //2008//

/2009/ Five new birth defects have been added.//2009//

-PININES (Proyecto de Identificacion de Niños con Necesidades Especiales de Salud, Spanish acronym): Puerto Rico, as well other jurisdictions is not included in the SLAITS. However, we are not waived regarding the responsibility to gather the information to monitor the progress on performance measures that use the data collected through the SLAITS. Toward this aim we designed the PININES. This is a collaborative effort with the Medicaid Program. The certification instrument used by the Medicaid Program was modified with the assistance of the MCH/CSHCN programs to collect information about 13 common conditions among CSHCN in PR. PININES enable us to have an idea of the most common chronic conditions among children enrolled in Medicaid.

/2007/ The DHS requested TA to develop a SLAITS-like CSHCN survey. The survey will provide us with data needed to report on NPM. According to PININES data for this reporting year, the total number of children evaluated for Health Care Reform enrollment decreased by 0.19% in comparison to previous year. A reduction in the percentage of congenital anomalies and conditions associated to sensory organs was observed.//2007//

/2008/PININES data for 2007 revealed that 16,120 had a special need condition.//2008//

/2009/ PININES March 2008 data showed 15,581 out of 447,829 GIP eligible children had a special need condition.//2009//

/2008/ The CSHCNP is in the planning phase of a study protocol to determine the prevalence of CSHCN in the island and to obtain data for the NPMs. We are actually gathering information from other states/territories regarding methodologies to determine prevalence of conditions of CSHCN and to obtain data for the CSHCN NPMs. //2008//

/2009/ The study protocol was completed and a company selected to perform the telephone interviews and obtain data for the NPM's. In February 2008, the MCHB notified us of the possibility they would fund the study if it was done simultaneously with IP Coverage study and using the same methodology.//2009//

-Folic Acid Campaign: This is a long-range collaborative campaign, which includes a broad array of organizations, private and public agencies. This campaign has been very successful in decreasing the rate of infants born in the Island with neural tube defects. In fact, the National Birth Defects Prevention Network honored PR with the Birth Defects Education and Prevention Award for 2004. This award was in recognition of the outstanding activities of an agency to promote public awareness of birth defects through innovative and collaborative education and prevention efforts.

-Universal Newborn Hearing Screening Program (UNHSP): This program is in the process of implementing newborn hearing screening at all birthing institutions. The program has among its strategies an Advisory Community to help in the implementation process. Legislation has been passed to support the UNHS in PR.

/2007/ Thirty five birthing hospitals report they perform hearing screening. This year, 71% of babies were screened before discharge, a 45.7% increase.//2007//

/2008/ Forty birthing hospitals report they perform hearing screening. For 2006, 85% of babies were screened before discharge; a 10% increase compared to last year. //2008//

/2009/ The percent of newborns screened for hearing loss increased to 97.5% in 2007.//2009//

-/2007/ Universal Newborn Metabolic Screening Program: This comprehensive program began in 1983. It screens, provides confirmatory testing, genetic counseling and treatment for infants with

a confirmed diagnosis.//2007//

/2009/ The Program has a Mass Spectrophotometer and will expand the number of conditions screened.//2009//

-Emergency Medical Services System for Children, Program for the prevention of pediatric emergencies: This program was developed and implemented in the University Pediatric Hospital with the support of the MCH program. A Law was approved aimed at the sustainability of the program through the recurrent allocation of $100,000 from state funds.

/2007/ Maternal Mortality Review Committee- A multidisciplinary committee has been established to evaluate pregnancy-related deaths identified by the maternal mortality surveillance system.//2007//

/2007/ Healthy Start Community Based Consumer Groups - Informal community based groups of participants in the Home Visiting Program. They meet to identify barriers to health care and health related problems and work toward eliminating them.//2007//

/2008/ The Abstinence Coalition is composed by public organizations, private entities, youth, parents, and physicians. Its goal is to recommend innovative strategies to decrease sexual activity and other high risk behaviors among youth.

The Perinatal Guidelines Review Committee: a multidisciplinary committee whose goal is to adapt the perinatal guidelines to PR situation; with this adapted guidelines the evaluation subgroup will classify hospitals that provide perinatal services.

The Office of the Patients' Ombudsman is working on the BCAP initiative. Its first phase is improving birth outcomes and screening children ages 0-3 for developmental delays and referral to early intervention services, if needed. MCH is actively collaborating with this initiative.

The CSHCN Title V Committee meets bi-monthly to implement the plan developed to achieve NPMs. //2008//

/2009/ The CSHCN Committee was able to develop an interagency workshop to share information with medical students about sensitivity, transition to adult life and other CSHCN related topics.//2009//

/2009/ BCAP is currently working to eliminate barriers preventing PCP from complying with the EPSDT schedule. Once measures to remove them are eliminated, compliance will be monitored.//2009//

In closing up this section, it is imperative to underscore that in PR we have a health care system in which the three sectors that affect the health decision --making are there. These are the:

-Informal sector based at the community level, consisting of individuals, families and concerned groups organized to promote specific health issues.

-Formal health care system consisting of network of health providers, organizations, public and private health institutions, and different levels of care that provide preventive and curative services.

-Intersectorial sector comprised by other public, private and non-governmental entities that indirectly influence health.

However, in spite of the above, this health care system has been inefficient in achieving its goal of enhancing the optimal health of all subgroups of the population. This is so because of its

fragmentation and the lack of a well designed Health Management Information System (HMIS). A HMIS is necessary for the proper communication among all the parts comprising the HCS. Without it, managers are unable to manage their programs based on reliable data that may be transformed into the information needed for selecting the most appropriate interventions.

Toward this aim, the MCH program established the Monitoring and Evaluation Section of Title V described elsewhere. The current administration nominated a Health Commission to evaluate the HCR initiative. Last June both MCH/CSHCN directors participated in a public hearing conducted by a subcommittee which is evaluating the health promotion and preventive components under the HCR. The MCH Director emphasized the impact of the GIP on goals and objectives set for the MCH population. We understand that major changes in the implementation of the HCR will result from the findings of this Commission.

/2007/ On February 18, 2005 the Governor created a Commission for the Evaluation of the Health Care System in Puerto Rico. It was entrusted with evaluating the current health care system and its increasing costs, and submitting recommendations to modify it in order to improve the health status of residents of PR. After a long process, the Committee submitted its report on November 2005. The report establishes the DoH as the lead agency for all public health efforts, responsible for establishing public policies and guidelines for health care, ensuring access to quality care for residents and providing low cost basic insurance coverage for the uninsured. It urges the creation of organizational structures that monitor health promotion and education activities and oversee the evaluation of health care system activities. The development of an Information System that would eventually facilitate the establishment of the electronic medical record is also included in the recommendations. The document recommends integrating the physical and mental aspects of health care provision.

The Commission recognizes changes should be made to the current health care system and it proposes two different health delivery systems scenarios. Both remove the economic risks of health care management from the primary care provider and place them in the hands of the government or the health insurance companies. It recommends changes should be gradually introduced after pilot projects are tested in a limited number of regions. The new coverage being suggested should have medication coverage and reduce medical liability risk for providers.

The new contracting cycle begins in July 2006. For this upcoming period several options are being considered. Most shift the financial risks away from the providers and into either the government or the health insurance companies. The main goal is to reduce payment to the health insurance companies. Several pilot projects will be taking place in diverse areas of the Island. Contracts for these pilot projects will be for one year. After the pilot test period ends, results will be evaluated to determine if the model is to be continued, expanded or eliminated. Under this new contract preventive health care services will be provided by the PRDoH. Recommendations will be implemented as funding becomes available.//2007//

C. Organizational Structure

The Puerto Rico Department of Health (PRDoH) is the umbrella agency assigned in Article IV, Section 6 of the Constitution of the Government of PR responsible for all matters pertaining to public health, with the exception of maritime quarantine. The Secretary of Health is appointed by the Governor of Puerto Rico and confirmed by the Legislature.

The Administrative Order No. 179, signed by the Secretary of Health on January 15, 2003, determines the current organizational structure of the Agency (Appendix 1). It comprises 6 secretariats, 12 offices and programs and 6 administrations, the General Council of Health and the Corporation of the Cardiovascular Center of PR and the Caribbean, all responding directly to the Secretary of Health, as well as three offices which respond to the Sub-Secretary of Health.

A. Assistant Secretariats:

1. Secretariat for Planning and Development
2. Secretariat for Regulation and Certification of Health Facilities
3. Secretariat for the Prevention and Control of Diseases (ASPCD)
4. Secretariat for Health Promotion
5. Secretariat for Health Protection
6. Secretariat for Administration

B. Offices and Programs:

1. Office of the Secretary of Health
2. Office of Internal Audit
3. Office of Communications and Public Affairs
4. Office of Legal Affairs
5. Office of Informatics and Technologic Advances (OITA)
6. Office of Human Resources and Labor Relations
7. Office of Budget and Finances
8. Office of Catastrophic Funds
9. Office of PR for Coordination with PAHO-WHO
10. Office for the Administration of HIPAA Law
11. Office of External Affairs
12. Correctional Health Program

C. There are six (6) independent agencies, administrations, councils and commissions created by law under the umbrella of the DoH. These are the following:

1. Administration of Mental Health and Anti-Addiction Services: Law 67 enacted in August 1993.
2. Administration of Medical Services: Law 66 enacted in June 1978.
3. Corporation of the Cardiovascular Center of PR and the Caribbean: Law 51, June 1986.
4. General Council of Health: Law 23, June 1976.
5. Commission for the Prevention of Suicide: Law 227, August 1999.
6. Commission of Food and Nutrition: Law 10, January 8, 1999.

There are three (3) offices and programs that have been delegated under the supervision of the Sub-Secretary of Health. These are the following:

1. Office for Regulation and Certification of Health Professionals
2. Regional Health Coordinators
3. Office of Nursing Affairs

The current Administrative Order establishes the vision, mission, goals, organizational structure and core functions of its components under the umbrella of the DoH.

The goals of the DoH are to:

* Increase years of productive healthy life of all residents in PR;
* Reduce health disparities among residents in the Island; and
* Achieve access to preventive health services for all.

The DoH places special emphasis in health promotion, prevention and control of diseases, and protection of health. (3Ps)

The ASPCD is responsible for the development and implementation of strategies and activities geared toward the identification of risk factors contributing to poor health among all individuals. It

is also charged with the development and implementation of needed programs aimed at the reduction or elimination of such risk factors and the prevention of diseases. Its approach is based on primary interventions at the community level and with special populations.

The ASPCD is comprised of a number of divisions and programs which address a wide scope of health needs of the different MCH population groups. These include the Division of MCH, Division of Habilitative Services, Division of Preventive Health, Central Office for AIDS Affairs and STD's, Mental Retardation Program, Division of Oral Health, Rape Victim Center and the WIC Program.

The PR Title V program is comprised of the MCH and CSHCN divisions, which are within the organizational structure of the ASPCD. Its directors work collaboratively and in coordination promoting the development of systems of care for all women and children and the provision of direct, supportive population-based and infrastructure building services. The goal is to decrease maternal-infant and pediatric mortality in PR. Each division is integrated by several programs, projects and activities supported by Title V funds and other federal initiatives.

Before the implementation of the HCR, PR's MCH program played many different roles in serving mothers and children, including providing direct services, administrating population-based programs and assuming responsibility for core public health functions.

With the advent of the HCR and aided by the recommendations of a TA supported by Region II in 1995 (Health Systems Research, Inc.), the MCH services were refocused. Title V resources were directed toward filling the gaps in direct services not covered by the GIP, development and implementation of support programs for at-risk mothers and children, development of population based programs, infrastructure building services, such as conducting activities aimed at improving the integration of the public and private systems of health care, needs assessment, applied research, development of surveillance systems, inter-agency coordination of related services, professional development, public education, etc.

Since these divisions and programs are under the same leadership, the collaboration, cooperation and coordination of services among the central, regional and local staff is facilitated.

/2007/ On March 20, 2006 the Secretary of Health signed Administrative Order #207 which establish the new organizational structure of the Puerto Rico Department of Health (Appendix 1). This reorganization took into consideration similarities between programs, program size, efficiency, centralized vs. decentralized services, interdependency of functions, and the current government fiscal and administrative reform. The reorganization is expected to facilitate collaborative efforts and integration of projects. The new organizational structure has three main structural levels:

Advisory entities responding directly to the Secretary of Health:
Health Council
Regional Health Directors
Internal Audit Office
Legal Counsel Office
Communication and Public Affairs Office
Commissions for Suicide Prevention, Nutrition and Radiation Control
Pan American Health Organization Office

Other entities responding directly to the Secretary of Health:
Direct Service Health Care Facilities (ASSMCA, ASEM, Cardiovascular)
Emergency Response Corps
Research and Epidemiology Office
Medicaid Office
Public Policy Office
Center for Bio-security Preparedness and Emergency Response

Office for the Regulation and Certification of Medical Services Providers

Support Services Units: Provide administrative support:
Auxiliary Secretariat for Health System Planning and Development
Human Resources and Labor Relations Office
Technology and Information System Office
External Resources Office
Auxiliary Secretariat for Administrative Affairs
Fiscal Affairs Office

Operational Units: They provide health prevention, promotion and protection services at the central, regional and municipal level:
Auxiliary Secretariat of Family Health and Integrated Services
Auxiliary Secretariat for Health Promotion
Auxiliary Secretariat for Medical and Nursing Affairs
Auxiliary Secretariat for Health Care Facilities Regulation and Accreditation
Auxiliary Secretariat for Environmental Health and Public Health Laboratories

The highlights of the Administrative Order can be summarized as follows:

-Creation of an Auxiliary Secretariat for Medical and Nursing Affairs whose main responsibility is dealing with direct patient care (hospitals and clinics).

-Reinforcement and expansion of the Auxiliary Secretariat for Health Promotion. It will house services provided by the WIC Program, the Program for Disease Prevention and Control, Oral Health and the Nutrition Internship Program.

-Creation of the Research and Epidemiology Office and the Center for Bio-security Preparedness and a Public Policy Office. Both respond directly to the Secretary of Health.

-The Auxiliary Secretariat for Prevention and Disease Control changed its name to Auxiliary Secretariat of Family Health and Integrated Services. The Maternal and Child Health Division is included in this Secretariat, along with the Immunization Program, Center for Victims of Sexual Assault, Central Office for HIV and Sexually Transmitted Disease Affairs, Mental Retardation Services Division. (Appendix 2)

Some changes particularly affect Title V. Under this new organizational structure the Maternal, Child and Adolescent Division and the Habilitation Services Division are fused into one Division (Appendix 3). It is part of the Auxiliary Secretariat of Family Health and Integrated Services. Its name is the Maternal, Child and Adolescent Division comprised by three distinct sections:

-Perinatal, Child and Adolescent Services Section
Included in this section will be: Healthy Start Project, Comprehensive Adolescent Health Services Project, Abstinence Only Education Project, Birth Defects Surveillance System and the Folic Acid Campaign, System Development and Inter-agency Collaboration Project which in turn includes the Early Childhood Comprehensive System Project, the Asthma Program and the Asthma Surveillance System.

-Children with Special Health Care Need Services Section
It will include services provided by the Children with Special Health Care Needs Program, the Early Intervention System of Services and the Universal Newborn Hearing Screening Program.

-Evaluation, Monitoring, Research and System Development Section
The State System Development Initiative is an integral part of this section. //2007//

/2009/ The PR Office of Management and Budget has endorsed and made official the

organizational structure established by Administrative Order #207 signed by the Secretary of Health on March 20, 2006.

As of March 2008 administrative and fiscal matters pertaining to federally funded projects will be handled exclusively by the External Resources Officer. He will be responsible for managing issues related to the NGAs and FSRs of all the projects and programs sponsored with federal funds. They will help programs comply with all the rules, regulations and reports required by the federal government within the specified timeline.

The MCH Division has just prepared a document that establishes the guidelines that to should be followed when project coordinators and fiscal and administrative components work with purchase orders. It establishes the procedures and timelines that must be followed when purchasing materials and equipment with federal funds. These guidelines should help us submit FSR in a more timely fashion.

The agency began implementing a new classification and retribution plan in July 2007. The purpose of the plan was to adapt the personnel classification and retribution scale to the role the DoH has assumed after the HCR began. It will allow the DoH to competitively hire and retain professionals in fields critically important to our infrastructure building activities such as epidemiology, biostatistics, data entry, informatics and evaluation. In addition to establishing these new personnel classifications, the plan has also improved the salary scales. These adjustments are expected to facilitate hiring new staff and retaining those that are performing well.//2009//

An attachment is included in this section.

D. Other MCH Capacity

MCH PROGRAM
Some of the current projects, programs and activities based on the MCH pyramid of services are:

Direct Services: We fill in the gaps in services needed by WCBA and CSHCN that are not in the GIP package, including contraceptive methods and Rhogam immunization in the 3rd trimester. Over 40,000 women obtain contraceptive methods and 1,500 receive Rhogam per year.

/2007/Current budget reduction, family planning costs and the legislated salary increase for nurses have reduced our capacity to provide them. Resources will be invested preferentially on IB, ES and PBS.//2007//

/2008/The actual budget reduction, family planning costs, and legislated salary increase have reduced our capacity to provide them. Resources will be invested preferentially on IB, ES and PBS.//2008//

/2009/Women requesting birth control services we are unable to fulfill are being referred to 330, Title X clinics or PROFAMILIA.

Reductions in federal and state budget allocations, legally mandated RN salary increases and the recently implemented HR Classification Plan have reduced CSHCNP economic capacity to provide specialty services.//2009//

Enabling Services: Family support services for at-risk pregnant, postpartum women and children up to 2 years of age.

-Home Visiting/Healthy Start Program: An enabling, family-centered, community-based service provided by specially trained public health nurses to pregnant/postpartum women and children up to 2 years of age with medical and social risk factors. The Home Visiting Nurses (HVNs) conduct

a comprehensive medical, psychosocial and environmental assessment, develop a tailored comprehensive care plan in conjunction with the family and coordinate needed services through referrals to the appropriate private or public entity in the community. During follow-up contacts with the family, the HVNs provide health education on a broad array of topics tailored to the family's needs. They conduct formal risk assessment for smoking, alcohol, drug use and maternal depression, providing orientation and referrals according to the level of risk. HVNs promote enrollment of mothers and children in a medical home as well as an inter-conceptional period of at least 24 months. Most HVNs have been trained to provide counseling on breastfeeding benefits and techniques. As of June 2005, there were 109 HVNs in 74 of the 78 municipalities. The caseload is 45-50 families for a service capacity of nearly 7,000 families per year.

-Perinatal Services: The MCH program has stationed 9 perinatal nurses (PN) at selected institutions that perform a significant number of deliveries. They are also trained in breastfeeding techniques, family planning, distribution of FP methods and risk assessment of mothers and infants. They provide individual and group education on a variety of topics, make referrals to HVNs and other needed services, collect perinatal data, participate in periodic surveys designed at the central level and are resources for the March of Dimes "Comenzando Bien" prenatal courses.

-Community Outreach: This is another important program developed as a result of the implementation of the HCR. It is staffed by 85 Community Health Workers (CHW) in 63 of the 78 municipalities. Among their main responsibilities are to identify pregnant women and children disconnected from the HCS and facilitate their enrollment into the GIP, coordinate interagency services, give follow up to certain situations of the Home Visiting clients as referred by the HVNs, conduct "Comenzando Bien" courses, provide orientation on MCH topics at the community level, disseminate educational materials, participate in health fairs and data collection, identify problems of access to health services and report to the appropriate level.

/2007/Financial constraints and a hiring freeze make replacing HVNs difficult.//2007//

/2008/Financial constraints and a hiring freeze make replacing HVNs and CHWs difficult.//2008//

/2009/We now have 93 HVN and 72 CHW.//2009//

Population-Based Services: The MCH program has directed more efforts to developing new population-based programs and enhancing its involvement with those available prior to the advent of the HCR. These include a newborn metabolic/genetic screening program, immunization program, prenatal care outreach, toll-free information line, public education on MCH topics, dissemination of educational materials, folic acid campaign to reduce birth defects, HIV counseling and testing of prenatal patients, AZT administration to HIV positive patients on a voluntary basis, and Universal Newborn Hearing Screening Program (UNHSP).

/2009/The UNHSP was awarded a 3 years competitive grant to implement innovative strategies to increase the number of babies that are followed up with audiologic evaluations by 3 months and treatment before they are 6 months of age.//2009//

The Comprehensive Adolescent Health program (SISA, Spanish acronym) integrates all activities directed at reducing adolescent risk factors: pregnancy, unintentional injuries, violence, alcohol and drug use, etc. SISA trains middle school students as peer health promoters and organizes various activities to support them in their work. In collaboration with the Kanopka Institute, SISA is developing a culturally appropriate curriculum on Positive Youth Development and a train-the-trainers guide to promote its application in agencies that serve adolescents.

At the central level SISA is comprised by a multidisciplinary team which includes the Associate Director (a physician with training in public health), a nurse, a social worker, an anthropologist, and a pediatrician with an MPH who coordinates the AEOP work plan. SISA also has 8 regional

coordinators under the supervision of the Regional MCH Directors.

The Abstinence Education Only Program (AEOP) is integrated into SISA. Among its strategies are the Sex Can Wait Curriculum, peer groups led by mentor teachers, teacher training, parent workshops, summer camps and dissemination of educational materials.

Infrastructure Building Services: This is an area of enormous development after the HCR. The MCH program has developed a section of programmatic advisors on reproductive health, pediatrics, social work and health education. The nutritionist and nurse coordinators retired last year.

The Title V Monitoring and Evaluation Section is located at this level of service. It is supported by the SSDI project and staffed by an extraordinary group of skilled public health professionals, including a Demographer who is the SSDI and Section Coordinator, a Biostatistician in charge of the PRAMS-like surveillance, two epidemiologists (master level), one in charge of investigations on reproductive issues and the other on children's health; an Evaluator in charge of the development and implementation of a maternal deaths surveillance system, a Programmer who supports all data infrastructure issues and coordinates with OITA, and the data contact, an Evaluator in charge of the Title V Electronic Monitoring System. He also collaborates with the Title V Director in the needs assessment and monitoring of the Title V action plan, designs instruments to collect qualitative data, and evaluates programs.

-MCH Advisory Body (Healthy Start Consortium): It is comprised of about 50 persons representing public agencies, academia, community organizations, and consumers. They provide input on the selection of MCH priority needs and how to address them, help in the coordination of services across public and non-governmental agencies and are resources for professional development.

-MCH Regional Working Groups (RWGs): These are comprised by members of public and private agencies and consumers. They facilitate coordination of services across agencies and programs and provide recommendations to deal with system problems that interfere with access to services.

/2007/-Maternal Mortality Review Committee: The committee members include a social worker, midwife, health educator, obstetrician, nurse, pediatrician and evaluator. It has been meeting regularly to review unidentified causes of maternal deaths with summaries of information gathered on maternal deaths. Based on information gathered and multidisciplinary evaluations, recommendations are made to improve the health care delivery system.//2007//

/2009/A FIMR project and a Preconceptive Health Committee are in place.//2009//

Other activities include the development of standards of care, interagency coordination, technical assistance and support of community programs, professional development in the area of MCH, information dissemination to concerned stakeholders, policy development and assurance of care, among others.

The MCH/CSHCN programs possess the technology (computers and statistic software) needed to perform an excellent work.

The MCH Director, a board-certified pediatrician with a master's degree in public health, has occupied different positions at the PRDoH for 28 years. He has been a primary health care provider, director of a pediatric residency program, and director of the MCH program at regional level and holds the present position since Dec 1990. He was honored as the best student graduated from the MCH program at the 25th anniversary of the School of Public Health. In Nov 2004, he was the recipient of the 3rd Annual March of Dimes Jonas Salk Public Health Leadership Award.

/2007/The MCH Director retired in 2005 and a new acting Director was named.(Appendix 4A)//2007//

/2008/A new MCH Director, a pediatrician with an MPH, was named on 2006.(Appendix 4A)//2008//

/2009/The MCH Director appointed in Sept 2006 resigned in Oct 2007. A new Acting Director has been named. She is a board certified pediatrician with an MPH degree who has worked in the DoH since 1980. She has vast experience in clinical administrative and programmatic aspects of the MCH Division.(Appendix 4A)

The Adolescent Program Assistant Director, Anthropologist and ECCS Coordinator were rehired in Jan 2008.//2009//

To furnish the comprehensive array of services recommended by the MCH pyramid, we have 34 FT positions at the central level (Appendix 4) and 8 regional teams, each under the supervision of a Regional MCH Director. These teams are comprised of a coordinator of services for WCBA, coordinator of pediatric services, SISA coordinator, health educator, perinatal nurse and administrative support staff.

At local levels we have at least one HVN and one CHW. As of June 2005, there were 109 HVNs and 85 CHWs distributed across the Island. Four municipalities do not have HVNs and 15 lack CHWs.

CSHCN PROGRAM
Appendix 5 illustrates the organizational structure of the CSHCN program. It is comprised of several projects, programs and activities. These include 7 Regional Pediatric Centers (PCs), Early Intervention program (EIP), Early Childhood Comprehensive System project (ECCS), NUHSP, Asthma project, Folic Acid Campaign, Congenital Anomalies Registry, PININES and the Surveillance System of Autism Spectrum Disorders.

/2008/As of 2006 Administrative Order, the CSHCN Section is comprised of UNHSP, CSHCNP and EIP.//2008//

Direct Services: The CSHCN program provides services to eligible chronically ill and disabled children through its PCs, one rehabilitative hospital, specialty clinics at the University Pediatric Hospital, and 7 Immunology Centers for AIDS patients. Currently, the CSHCN program serves about 15,000 non-duplicated CSHCN per year.

/2007/During FY 2004-05, 10,808 non-duplicated CSHCN received services under Title V.//2007//
/2008/During FY 2005-06, 8,748 CSHCN received services.//2008//
/2009/During FY 2006-07, 7,885 CSHCN received services.//2009//

The PCs complement specialized services not covered by the GIP or provided in an insufficient amount. They have been certified as providers of specialized services for the networks of the health insurance carriers. At these facilities, eligible children receive specialty care, assistive technology, ancillary services, and highly specialized services required by children with metabolic and genetic disorders and mental retardation. Children with AIDS or hemophilia are referred to the appropriate programs. Health insurance carriers are billed for services provided to children holding the GIP or a third party payor. Reimbursement monies revert to the PCs.

Direct services are also provided to pediatric patients with complicated asthma by the Pediatric Pulmonary Program located at the PR Cardiovascular Center. This program is fully supported with Title V funds.

/2008/The number of children served by the PPP was reduced by 49%. Since Dec 2006, services are not being offered. ASES is analyzing alternatives to continue these services.//2008//

Enabling Services: The CSHCN program provides care coordination services primarily to children with developmental disabilities ages 0-3 who are eligible for the EIP. Nurses have been trained to perform this activity. Case management is conducted collaboratively with the Association of Parents of Children with Disabilities (APNI, Spanish acronym). There are 75 case managers (Service Coordinators) distributed across the Island.
/2007/The CSHCN Program provides care coordination services primarily to eligible children 0-21 years with severe disabilities.//2007//

/2008/It's necessary to clarify that CSHCNP provides case coordination in a limited manner. There are 92 service coordinators for the population under EIP.//2008//

/2007/A toll free number provides information about services and transfers calls to the PCs.//2007//

/2009/The CSHCN Section contracts Data-Voice to provide the toll free number services.//2009//

-Catastrophic Illness program. This program, funded 100% by the state, allows access to very expensive services to individuals with catastrophic conditions. A significant proportion of the patients are children under 21 years of age. They are served either in PR or in the mainland. Around 150 children benefit from the program per year, with costs ranging from 6 to over 7 million dollars.
/2007/ This year 105 children benefited from the program.//2007//
/2008/ This year 104 children benefited from the program.//2008//

Population-Based Services: The NTD prevention campaign through the promotion of folic acid consumption among WCBA is conducted with the collaboration of many partners and through a broad array of activities including dissemination of educational materials (posters, pamphlets, etc.) in a variety of settings and integration of the message into the health education curriculum beginning in elementary school.

Infrastructure Building Services: At this level the CSHCN has the following projects:

-ECCSP pursuing the development of cross-service systems to support children 0-5 years to be healthy and ready to learn. A State Interagency Planning Committee supports the project.
/2007/A Strategic Plan has been completed including its four basic components.//2007//

/2008/ECCSP was transferred to the MCH Division.//2008//

-UNHSP, in the implementation phase. Currently, 19 hospitals conduct hearing screening regularly.

/2008/ By June 2007, 30 out of 40 birthing hospitals are conducting screenings and entering data into the tracking system.//2008//

-Addressing asthma from a public health perspective. The CDC supports this project.

-Congenital Anomalies Registry, supported by CDC, tracks 13 categories of conditions.

/2008/-BDSS tracks a total of 43 birth defects.//2008//

-PININES. In collaboration with the Medicaid program, all children are screened for 13 chronic conditions at the time of certification for the GIP.

/2007/A Title V Committee with participation of families and key stakeholders has implemented a plan to achieve CSHCN PMs.//2007//

/2008/Activities are underway to create a Family Representative position as Title V staff.//2008//

/2009/Due to financial constraints this position has not been created.//2009//

/2009/The contract with HC Consulting to provide billing to HICs for services provided in the PC was discontinued and the DoH has taken over.//2009//
An attachment is included in this section.

E. State Agency Coordination

The needs of the MCH population are multiple and complex. Because of this, there is no public or private agency, program, or community based organization that can satisfy all the needs of the most vulnerable population comprised of women in their reproductive age, children and adolescents. It is therefore imperative to establish appropriate coordination mechanisms among all concerned entities in order to reduce duplication and fragmentation of services and to be more efficient in the utilization of the scarce resources available.

In Puerto Rico, we have in place fairly satisfactory coordination mechanisms among several public agencies and other sectors of the community at the state, regional and local levels. These coordination mechanisms are at both formal and informal levels. The Department of Health has established formal relationships with other state public agencies, local public health agencies, academic institutions, federally qualified health centers and tertiary health care facilities. All of these formal arrangements enhance the capacity of the MCH/CSHCN programs.

This formal coordination is the outgrowth of established laws and executive orders of the Governor, which mandate specific agencies and programs to sit at the table to coordinate certain types of services for the MCH population. There are also memorandums of understanding (MOU) among agencies and programs, which enhance the coordination of services. Other formal mechanisms, which contribute to the achievement of this goal, are interagency committees, task forces and coalitions, among others. Several of the laws, executive and administrative orders and committees require the participation of consumers.

At this point, we want to highlight some of the laws, executive orders, MOU and committees that enhance the provision of health services and coordination among all concerned entities, which serve the MCH population. The central staffs of the MCH/CSHCN programs are regular members of most of these arrangements.

General Public Policy:
*Law No. 72 enacted on September 7, 1993 mandated the establishment of a Health Care Reform which includes a GIP for all individuals under 200% of poverty line. Under this law ASES was created. ASES is responsible for negotiating and awarding contracts to private insurers to provide services included in ASES standard benefit packages.

*Law No. 194, August 2000: To establish the Patient's Rights and Responsibility.

*Law No. 408, October 2000: To establish the needs for prevention, treatment and rehabilitation in mental health, and to create the Bill of Rights of adults and minor patients.

/2008/ "Puerto Rico en Forma" (PR Fitness Program) is a collaborative effort established by two executive orders issued by the Governor of PR. It integrates municipal government and central government agencies efforts to increase physical activity and promote healthy eating habits in

order to reduce obesity in PR. These Executive Orders are:
*Executive Order No. 2006-33: to create the "Puerto Rico en Forma" Program and to establish its functions and objectives.
*Executive Order No. 2006-34: to authorize the use of funds for the "Puerto Rico en Forma" Program from the Salary Incentives Law of the PR Department of Labor and Human Resources.//2008//

Public Policies Concerning Women of Reproductive Age and Infants:
*Law No. 84 -- Enacted in 1987. This law mandates the Department of Health to create the Hereditary Diseases Program to detect, diagnose and treat children with Hereditary Diseases. It requires that every infant born alive in PR must be screened for PKU, hypothyroidism and sickle cell anemia. Currently, two other conditions are routinely screened: galactosemia and congenital adrenal hyperplasia. In addition, the Law requires the establishment of the Council for Hereditary Diseases of PR. The council is integrated by four (4) licensed physicians; one (1) representing the Secretary of Health; one (1) parent of an affected child; and one (1) member should represent programs of continued education for health professionals. Among its responsibilities, the council will recommend the type of conditions to be screened and the kind of diagnostic tests to be used by the Program of Hereditary Diseases of PR. This law is under revision of the Legislature in order to increase the number of conditions to be screened.

*Law No. 27 -Enacted on July 1992, allows health care professionals to provide prenatal care and postpartum services to minors without parental or guardian consents.

*Law No. 70 - Enacted on August 1997. It mandates the Secretary of Health to establish a committee charged with the responsibility to develop studies and provide recommendations for the reduction of infant mortality. The law requires an interagency committee including ASES, comprised of nine members under the leadership of the MCH Director.

/2008/ The Infant Mortality Committee, required by law, composed of public and private stakeholders and chair by the MCH Director, has been established to develop a plan of action and provide recommendations to decrease infant mortality in PR. The Plan of Action would integrate recommendations from the March of Dimes Preterm Task Force. The MCH Division is actively participating in this task force. //2008//

*Administrative Order 129, enacted on July 29, 1998 - To establish regulations for all health professionals through continuing education, requiring at least 3 CME credits on the subject of breastfeeding at the time of re-certification. This strategy is aimed at increasing the knowledge and promoting positive attitudes of health providers towards breastfeeding as a means of educating and encouraging breastfeeding in the community. A Steering Committee was organized, consisting of 11 partners from several private and public entities, such as MCH Division of the Department of Health; La Leche League; Department of Education; MCH Health Division of San Juan (Capitol City of Puerto Rico); WIC Program; LACTA Project; Department of Family Affairs; and community advocates. This committee developed a 5-year plan with the purpose of reaching the year 2010 objectives related to breastfeeding and includes the enforcement of Administrative Order 129 through a collaborative effort with the professional boards regulating the individual health practices. This Order also promotes 24-hour mother and child rooming-in in the hospital setting as a strategy to enhance breastfeeding and the well being of the mother and her infant. The Administrative Order has promoted several laws that protect and enforce the rights of all mothers to breastfeed their babies. These laws have been enacted recently as a result of the continued efforts of this committee as well as other breastfeeding advocates in the community.

*Law No. 32 -Enacted on January 10, 1999. To establish areas designed for breastfeeding and change diapers for young children in malls, government centers, ports and airports.

*Law No. 427 - Enacted on December 2000. To require that working breastfeeding women be

allowed 30 minutes per day to express their milk.

/2008/Law No. 239 of November 2006: This law amends Law No. 427 of 2000 to increase to one hour the time working moms have for breastfeeding or milk extraction at their work settings. //2008//

*Law No. 311 - A legislative mandate for newborn hearing screening is in place since December 19, 2003. Coverage for screening and audiological diagnostic testing is required for all health insurance plans in Puerto Rico.

*On March 13, 2004, Puerto Rico enacted Law 79 aimed at prohibiting the administration of any breast milk substitute to newborns without the written consent of the mother. Any institution that violates this law will be fined.

*Law No. 95, enacted on April 23, 2004, prohibits discrimination against women who breastfeed in any public setting.

*Healthy Start Consortium and Advisory Board to the MCH programs. Currently, it is comprised of about 40 members who represent public agencies including the Department of Health, academia, community based organizations, Medicaid, ASES, WIC, consumers, etc.

*Committee for the Promotion of Folic Acid Campaign - includes the Department of Education & Puerto Rico's chapter of March of Dimes among its members.

*Advisory Board of the Midwife Training Program of the School of Public Health - The MCH Director is an active member.

/2008/ Law No. 156 of August 2006: This law protects women's right during delivery, birth and postpartum period, such as, having someone to accompany her during the delivery process, being informed of the surgical procedures that may be available or necessary, benefits of breastfeeding, and vaginal delivery as her first choice if no complications arise, among others.//2008//

/2009/ *Preconceptional Health Committee: The committee has representatives from ACOG, the MCS Medical Health Insurance Company, Healthy Start, WIC, Birth Defect Registry staff, midwives and MCH Division staff. The Committee is developing a pilot project directed at improving the interconceptional health of women with diabetes in the western area of PR. It will be directed at postpartum diabetic WIC participants and diabetic WCBA enrolled in the MCS medical insurance company. Participants will receive four educational interventions which will be provided by staff from WIC, MCS, MCH and the Auxiliary Secretariat for Health Promotion.

A Collaborative Agreement between MCH and the PR Department of the Family allowed us to provide them with the technical assistance they needed to replicate our HVP model in two regions. MCH and HS staff have trained them on our home visiting procedures, risk assessment tools and shared with them our HVP manual and data entry forms. They will provide services to women in municipalities were we currently lack a HVN, and will serve primarily new cases in which there is strong suspicion of family violence, sexual abuse or that are already under child protective services. We will share training, data and educational materials. Regular meetings will be held between the two agencies to monitor the progress, identify and solve problems and identify areas for further collaboration.

A collaborative agreement between the MCH Division and ASSMCA has been signed. It includes active participation in each other's Advisory Committees and the sharing of data, trainings and educational materials.

Prematurity Taskforce: This taskforce is sponsored by March of Dimes. Among its members are representatives from AAP, ASES, Academia, Hospital Administrators, House of Representatives, MCH, NGOs and parents of preterm infants. It has several active subcommittees which are focusing their attention towards educating the public, providers and investigating risk factors associated with PR's high preterm rate. MCH is helping the taskforce in their investigative efforts.//2009//

Public Policies Concerning Children and Adolescents:
*Law No. 25 -- Enacted on September 1983 requires complete immunization as established by the DoH to all preschool, school age children and universitary students at the time of enrollment.

*Law No. 259 -Enacted on August 31, 2000. To establish an Emergency Medical Service System for Children Program for the prevention and surveillance of pediatric emergencies. The law assigns $100,000.00 per year for the implementation of the program. This legislation will allow the sustainability of the EMSC program granted by the federal government.

/2008/ The EMSC Advisory Committee mandated by law is composed of nine members from public agencies, hospitals, 911 services, health professionals and community members. Two Title V staff members participate in the Committee: the MCH Director, who chairs the Committee, and the Health Educator, which is the Healthy Start Project Coordinator.//2008//

*Law No. 296 - Enacted on September 1, 2000. This law mandates a medical evaluation according to EPSDT standards for all children enrolled at day care centers, Head Start programs, and private and public schools on an annual basis.

*Administrative Order 158, enacted on September 13, 2000 - To establish regulation for training in Comprehensive Adolescent Health.

*Law No. 177 enacted on August 1st, 2003: For the comprehensive protection and well being of childhood. It requires coordination (Art. 6) among the Department of the Family, Department of Education, Department of Health, AMSSCA, Housing Department, Justice Department & Police Department, among others.

*PR Safe Kids Coalition - Includes public agencies such as DoH, Department of Education, the Police Department, Fire Department and many non-governmental community agencies and individuals.

/2009/*Law 107, August 10, 2007 requires a special license for those who drive motorcycles. It requires taking a written exam, receiving a special training provided by a licensed instructor, becoming certified and then taking a road test. To drive a motorcycle a person must be 18 years of age or older, wear a safety approved helmet and follow a dress code. This law prohibits carrying passengers that are younger than 12 years of age.

Collaborative efforts are ongoing with the Public Health Emergency Response Preparation and Coordination Office. They have trained 30 of our staff in the Incident Command System and provided them with a curriculum specially prepared to train public health professional on how to respond in different emergency situations. MCH staff has been participating in their table top and full scale exercises. With their assistance the MCH Emergency Response Plan and COOP plan have been prepared.

A collaborative effort has been ongoing between MCH and WIC. The MCH Division biostatistician, epidemiologist and evaluators provided the WIC program TAs to help them design and evaluate a weight control intervention program. In turn, they provide us their nutritional expertise as we design questionnaires to identify risk factors associated with obesity. In addition, we share data and trainings.//2009//

*During 2004, interagency agreements with the Department of Family and the Early Head Start consortium's were revised and updated. Inter-agency steering committees were implemented for the UNHS and ECCS programs.

*Law No. 220 -- Enacted on August 21, 2004 to establish the Bill of Rights for pregnant teens enrolled at public schools.

*COPRAN -- It is the Puerto Rican coalition aimed at preventing underage drinking. This aim is pursued through a wide array of activities which include lobbying for appropriate legislation. The MCH program has a formal collaborative agreement with COPRAN.

/2007/ Funds to continue this program are no longer available.//2007//

/2007/ Law 66 enacted on March 2, 2006. This bill eliminates tobacco use in bars, casinos, and other workplaces, as well as in private cars with children under 13 years old aboard. It makes Puerto Rico the 13th U.S. state/district/territory to go smoke-free. //2007//

/2008/ On March 2, 2006, Law No. 40, the Law to Regulate Smoking in Public and Private Places, was amended by Law No. 66. This comprehensive law aims to protect the non-smoking public from the harmful effects of environmental tobacco exposure, as well as to increase awareness of the health consequences of smoking. It prohibits smoking in all public spaces, including workplaces, businesses, schools and universities, day care centers, private vehicles when a child under age 13 is a passenger, restaurants, cafeterias, bars, pubs, convention centers, parks, and almost all private and public spaces. Exceptions are made for businesses that are dedicated exclusively to the sale of tobacco products, private homes, and hotel rooms designated as smoking. //2008//

/2009/ Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees. This is a major step in PR continuing efforts to decrease smoking. It will take effect in July 2008.//2009//

/2007/ The Puerto Rico Penal Code was amended. This reform will have an impact on some of the indicators related with adolescents. For example: the age when an adolescent female can consent to have sexual relations has been increased from 14 years to 16 years. This change limits the services that can be provided to a sector of the adolescent population.//2007//

/2009/*Primary Care Association and 330 clinics are participating in the ABCD Screening Academy pilot project that will promote the medical home model and implement the use of a developmental screening tool (ASQ).

****The Juvenile Correction Administration is collaborating with the MCH Adolescent Program (SISA) in the implementation of the youth promoters program in two of their juvenile detention centers.***

****Title X clinics, federally qualified heath centers and PROFAMILIA, an NGO that specializes in reproductive health issues, have been providing family planning services to some of the GIP participants we have not been able to serve due to our limited fiscal resources.***

****"Alianza Niños y Jóvenes Activos, Saludables y Bien Nutridos". This alliance was established in December 2007 with the purpose of educating the public on issues of nutrition and physical activity in children and youths, establishing a public policy that would support local efforts to reduce the obesity epidemic, establishing a surveillance system and conducting research to identify risk factors associated with the condition. Among its members are representatives from the Departments of Agriculture, Labor, Housing, Education, Health, Sports and Recreation, AAP, Insurance Commissioner, Commission on Nutrition, WIC, College of Nutritionist, University of PR, School of Public***

Health and communication experts, among others.

****The UPR Medical Sciences campus has established an MCH Oral Health Clinic that will only treat pregnant women and young children. Their staff will train community dentists in techniques to treat them in their private offices. Our HVN will also be trained on appropriate dental health interventions for pregnant women and young children.//2009//***

Public Policies Concerning CSHCN:
*Administrative Order No. 95 - The Metropolitan Pediatric Center was integrated to the University Pediatric Hospital to maximize its administrative functions and to better serve the special needs population. Normatively, the Pediatric Center responds to the Division of Habilitative Services. /2008/ The Division of Habilitation Services is now the Section of CSHCN.//2008//

*Law No. 51- This law was enacted on June 7, 1996. It mandates the provision of comprehensive educational services to individuals up to 21 years of age who have special educational needs. The law requires the establishment of an Advisory Council. An outstanding responsibility of the Department of Health under this law is to screen all children born in PR in facilities of the DOH or privatized, for developmental delay during the first three months of age. Identified children will be referred to the Early Intervention Program (EIP) with parental consent for eligibility determination and for provision of services until age 3 years. This strategy will assist the program to increase the number of children identified and enrolled during the first year of age. From ages 3 to 21, the Department of Education is ultimately responsible for providing educational and related services and the required coordination with six other agencies.

/2007/ Collaboration with the Federally Qualified Health Centers (Section 330 of the federal Public Health Act) has been increased. Title V and the administration of the 330 Centers share data on topics related to MCH issues. Personnel of the MCH Division also served as resources for Continuing Medical Education activities sponsored by the 330 centers.//2007//

/2007/ * Law No. 56 - In 2005, PRDoH and the Asthma Coalition impelled the creation of "Law for the Treatment of Students with Asthma". This law, signed on February 1, 2006, recognizes the right of students with asthma or other related conditions to self-administer medications in school with the consent of their parents or guardians.//2007//

/2008/Law No. 238 (2004) - Bill of Rights for Persons with Disabilities to adopt public policy to address the needs of persons with disabilities.

Law No. 103 (2004) - Bill of Rights of Children and Adults with Autism to establish a comprehensive system of protection for persons with Autism including medical services, education, physical, social and psychological rehabilitation.

RC No. 289 (2006) - orders the PRDOH to establish a Register for Children and Adults with Autism. //2008//

* Law No. 318 -Approved on December 2003 designates the PRDoH as responsible for developing and implementing public policy for the evaluation, management, and registry of children and adults with autism.

/2008/ Law No. 318, amended (Law No. 122, 2006), was implemented to reduce the number of members of the Autism Interagency Committee who has the responsibility of developing a public policy for the population with Autism and other disorders under the Autism Spectrum. //2008//

/2009/ The Interagency Committee submitted its recommendations to the Secretary of Health in December 2007. The Secretary of Health will submit to the Legislature a proposal that will help establish PR's public policy for the Autistic population.//2009//

/2009/ *Law No. 3, 2007: Puerto Rico Assistive Technology Program (PRATP) Law requires UPR-PRATP to implement a permanent program of recycling, leasing and reusing assistive technology equipment in coordination with other government agencies. The purpose of the law is to increase access to AT devices and services for persons with disabilities.

****A project of the House of Representatives (P.C. 4230) was proposed to hasten the purchase and acquisition of AT devices for persons with disabilities. Agencies involved include Department of Education, Department of Health and Vocational Rehabilitation.//2009//***

* Law No. 351, September 2004: To establish a Birth Defect Registry at the PRDoH. This law requires that all providers and agencies which come in contact with cases of birth defects must report them to the Department of Health regardless of gestational age. The Birth Defects Surveillance System program is responsible for developing protocols for an active surveillance system and to establish a data bank to allow research on contributing risk factors to birth defects. The principal objectives of this law pursue the determination of incidence and prevalence rates of selected births defects in PR, develop prevention strategies, promote early referrals of identified cases to available services and promote the collaboration among the public at large and private partners concerned with this issue.

/2008/The regulations for the Law No. 351 of September 2004 were developed and approved by the DOH Legal Services in June 2006.//2008//

/2007/ Law No 56 - February 2006. Law for the Treatment of Students with Asthma While in School.

* Advisory Council of Special Education to the Secretary of Education - The CSHCN director represents DOH.

* State Council on Developmental Disabilities - The CSHCN director represents the Secretary of Health.

* The PR Asthma Coalition implemented in 2000 to reduce morbimortality due to asthma in Puerto Rico. The Director of Pediatric Pulmonary Program is the president.

/2008/A new director was elected for the PR Asthma Coalition//2008//

* Committee of the University Affiliated Program (UAP) -- Includes consumers.

/2007/ Its name has changed to Centers of Excellence. The DoH is a member of the Alliance for Full Participation. The alliance is developing a plan to support full participation of people with disabilities in daily activities.//2007//

/2008/ The plan to support full participation of people with disabilities was presented in Washington and is being implemented. The main priority of the Committee was to review the Bill of Rights for Persons with Disabilities; recommendations for amendments were submitted to the Legislature.//2008//

*United Funds of PR - CSHCN director participates with other representatives of the community.

/2007/ The SECCS Task Force is collaborating with the Legislature to develop public policy for children ages 0-5 and families.//2007//

/2007/ A needs assessment of persons with autism spectrum disorders is under way. Once

completed, it will contribute to the development of public policy. It is sponsored by CDC.//2007//

/2008/ The data collection phase for the needs assessment of persons with autism spectrum disorders was completed; CDC sponsoring ended in September 30, 2006. An epidemiologist was contracted for the analysis and reporting phases of the PR First Autism Spectrum Disorders Report. This study will provide baseline data for the implementation of an Autism Registry at the PRDoH. //2008//

/2009/ The Autism Registry is being implemented by the PRDoH, State Epidemiologist Office. The needs assessment study conducted to obtain information on persons with ASDs revealed a male to female ratio of 4.95 to 1. Most of the parents (88.7%) reported that children were receiving special education services through an IEP. Parents reported observing for the first time an unusual development in the child at the age of 24 months. The median age for initial diagnosis was 36 months.//2009//

/2009/ *Law No. 125, 2007: The law that created the Health Services Administration of Puerto Rico (ASES) was amended to provide medical equipment and nurse specialist home visits for children 0-21 years of age on chronic ventilation via tracheostomy.//2009//

/2007/ In 2005, a MOU between DoH and ASES was signed. It will allow us to remove barriers associated with access to services for CSHCN that have been identified through the "Champions for Progress Center" Initiative. The main goal of this grant was to provide leadership for the development of a system of services for CSHCN. Families, providers and representatives from the health care insurance companies participated in the initiative. Together they established three common objectives: 1) Educate stakeholders on the development of Systems of Care for CSHCN, including six CSHCN (MCH) core outcome measures; 2) Develop collaborative strategies to establish partnerships; 3) Develop a list of reimbursement codes. Other grant recommendations were included in the Title V action plan.//2007//

/2009/The University of Puerto Rico Institute for Developmental Deficiencies will provide TA and trainings to HVN on the administration and interpretation of the ASQ questionnaire.//2009//

F. Health Systems Capacity Indicators

Introduction

/2009/ The availability of information based on valid, reliable data is an important requirement for the analysis and objective evaluation of the health situation, evidence based decision-making and the development of strategies to promote health among our population. We have established mechanisms to obtain information from DoH programs and other agencies that serve and gather information on the same target population. We look for new data sources and work towards linking them into a child electronic record. In addition, we disseminate our information to guide program development, evaluation and public policy development. An MCH Data Book will be published for this purpose.

Despite economic difficulties, PR has maintained health care insurance for those with incomes below 200% SPL. We direct our efforts to ensure all those enrolled receive the services included in the health care plan package according to the DoH standards of care. The MCH Division works to improve our systems capacity to serve GIP enrollees and improve their health and wellbeing by focusing on HSCI target areas of reducing the burden of asthma and improving oral health, EPSDT compliance and adequacy of PNC.

We used GIP enrollees as proxy for the Medicaid insured population. However, the amount of Medicaid and SCHIP funds PR receives only covers 11.1% and 2.8%, respectively, of the medical expenses of those enrolled in the GIP.//2009//

Health Systems Capacity Indicator 01: *The rate of children hospitalized for asthma (ICD-9 Codes: 493.0 -493.9) per 10,000 children less than five years of age.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	483.5	519.1	683.7	586.9	437.0
Numerator	13502	13799	17618	14766	10820
Denominator	279252	265820	257697	251604	247624
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Data for the numerator is preliminary from ASES and OCS since they are still revising the data. The denominator is the annual estimate of the population on July 1, 2006 as reported by the US Census Bureau for Puerto Rico.

Notes - 2005
Data for the numerator was obtained from the Health Insurance Administration (ASES) and the Office of the Insurance Commissioner (OCS). ASES provided hospitalization claims data of patients holding the government insurance plan (Reform). The OCS provided hospitalization claims data from the insurance plans other than Reform. OCS reported data from patients with private plans and may not represent the universe of the population.
The denominator is the annual estimate of the population on July 1, 2005 as reported by the US Census Bureau.

Narrative:
/2009/ Asthma is an important health issue in PR. PR's asthma morbidity and mortality is the highest among all the US states and territories. Since 2003, the rate of children less than five years old hospitalized for asthma has presented a fluctuation. From 2003 to 2005 there was a statistically significant increase in the observed rate (P value = 0). On the other hand, from 2005 to 2007 there was a statistically significant decrease (P value = 0), reaching the lowest rate among these years of 437.0/10,000 in 2007. Although it is difficult to scientifically prove any direct correlation between the State Asthma Plan interventions and the decrease of asthma hospitalizations, it is important to mention that since 2003, a series of efforts and interventions have been initiated by the Puerto Rico Department of Health through the Asthma Plan, the Puerto Rico Asthma Coalition, pharmaceutical companies and other asthma collaborators to reduce the asthma burden in Puerto Rico.

According to the 2005 Behavioral Risk Factor Surveillance Survey (BRFSS), in Puerto Rico, approximately 321,406 children under 18 years old (30.8%) were diagnosed with asthma by a health professional at any time in their life. Among them, 54% persisted with asthma. The lifetime and current asthma prevalence seems to be higher in Puerto Rican children than in children in the United States. Childhood asthma seems to be more prevalent in males than in females. During 2006, there was one (1) asthma related death

among children 1-14 years old. However, in 2007, there were two (2) asthma related deaths.

The Puerto Rico Department of Health, faced with this asthma burden, established an asthma project subsidized by the Centers for Disease Control and Prevention (CDC) to reduce asthma morbidity and mortality. This project has been able to develop and successfully maintain the PR Asthma Surveillance System (PRSS), and to establish working committees with PR Asthma Coalition members. Together they were able to elaborate the Asthma State Plan (ASP), a keystone for the control of the asthma burden in PR.

The Asthma State Plan (ASP) is divided into 7 focal areas: Partnerships, Surveillance, Health Promotion / Education, Public Policy, Environment, Access to Health Services and Evaluation. Their work plans, activities and interventions are modified and carried out based on the needs and priorities the PRAC and the PRSS identify. Currently our main intervention priority is to train primary care physicians (PCPs) and health professionals in the use of the National Asthma Education and Prevention Program (NAEPP) asthma treatment guidelines. During the period of 10/06 to 11/06 and 9/07 to 11/07, the Asthma Project (AP) has offered five (5) adult and ten (10) pediatric asthma management trainings to PCP groups and other health professionals. The municipalities with higher rates of asthma morbidity and mortality according to the Puerto Rico Asthma Surveillance System (PRSS) were selected as sites for these trainings. A total of 424 health professionals participated in them. They were very well attended, since 85% of those that pre registered did attend.

The Asthma Project (AP) and the Puerto Rico Asthma Coalition have identified that one of the most significant barriers towards achieving asthma control of moderate to severe asthmatics is the underutilization of long-acting asthma medications in the management of their condition by the GIP providers. It is believed the elevated costs of these asthma medications is adversely affecting providers' capitation and thus discouraging them from prescribing them according to the established guidelines. Therefore, another priority area for the SAP is to focus its work into developing a public policy to improve accessibility to these medications.

The MCH Division continues improving and implementing the SAP to help the PRDoH meet the Healthy People 2010 objectives for Focus Area #24 of Respiratory Diseases and to monitor progress regarding Title V performance measures and asthma related indicators.//2009//

Health Systems Capacity Indicator 02: *The percent Medicaid enrollees whose age is less than one year during the reporting year who received at least one initial periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	NaN	12.1	57.9	70.8	91.7
Numerator	0	2949	14051	15489	15770
Denominator	0	24374	24269	21886	17191
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year					

moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.
Assuming that in PR the Medicaid funds are used to pay the population below 100 SPL, the eligible population below 100 SPL (Medicaid) were 1,023,847 and those insured were 1,106,145. The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old and below of the 100 SPL eligible and insured for the GIP, respectively.

Notes - 2006
Data represents the GIP infant population. It was provided by the Health Insurance Administration (ASES).
The numerator is the number of infants who received at least one initial screening service. The denominator is the total number of eligible infants in the GIP for year 2006. Since ASES do not provide the number of Medicaid and SCHIP individually, the reported data includes GIP participants less than 1 year old.

Notes - 2005
Data represents the GIP sector only. It was provided by the Health Insurance Administration. The numerator is the estimated number of infants who received at least one initial screening service according to the EPSDT. This percentage is a reflection of the Medicaid contribution to the total GIP cost. The denominator is the total number of infants enrolled in the GIP for FY 2004-2005.

Narrative:
/2009/ Due to its territorial status, Medicaid funds allotted to PR are significantly lower than for the states. Because Medicaid funds are not enough to provide services for all Medicaid eligible children, health care services provided to these children are mainly financed by local government funds. The budget ASES uses to purchase the GIP for low income individuals is a combination of state, federal (Medicaid and SCHIP) and local funds (municipal).

In FY 2007, Puerto Rico devoted $1,534.1 million to finance the GIP for persons with incomes below 200% of the SPL. During that same period, Medicaid funding remained flat ($169.8 million). Nevertheless, we experienced an increase of $1.4 million in SCHIP funds. Because is not possible to have the exact number of infants that received services through the Medicaid funds, we estimated it using the population below the 100 SPL covered by the GIP. Approximately 1.6% of the total GIP population below 100 SPL, represents insured infants. We assumed that the services these infants received are covered exclusively by the Medicaid funds. Based on this assumption, we estimated that about 15,770 of 17,191 (91.7%) infants received services through Medicaid funds.

Determining the percent of Medicaid enrollees less than one year old who received at least one initial periodic screen is particularly difficult since our current health care delivery system for this population does not follow the fee for service model and instead uses a capitated managed care system model. Because of this, providers receive a fixed amount of dollars per patient per month to cover all their individual medical expenses and services provided are not itemized or separated according to the funding source.

Last year we met with ASES to discuss ways in which their data could be improved so we could report this HSCI for Medicaid enrollees exclusively. During the meeting, we were told their information system only uses claims data and that the way the information is

compiled will not be helpful to us as we attempt to calculate this indicator. However, they were receptive to the idea of modifying parts of their information system in order to separate claims coming from Medicaid beneficiaries from those related to SCHIP. Although the modification has not been completed, these changes may explain the difference in the numbers reported this year compared to previous years.

The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data from ASES to monitor this HSCI. In addition, SSDI staff continues to focus on improving the data linkages between birth records and Medicaid eligibility files.

Backed by laws that establish newborn metabolic and hearing screening as mandatory, PR has been able to provide the vast majority of its infants with at least one of the periodic screen included in the EPSDT schedule. The most frequent screening test provided to infants born in Puerto Rico is the newborn metabolic screen. During fiscal year 2006-2007, 48,063 out of the 48,140 registered live births during that time were screened. This figure represents 99.8% of all live births during the reporting year. Preliminary 2007 data indicates that 97.5% (44,965 out of 46,096) of the newborns delivered were screened for hearing loss.

During their daily activities CHW, HVN and perinatal nurses in the eight Health Regions educate parents on the content of adequate pediatric care and encourage them to demand it for their children. Medicaid staff also promote the same message when they participate in activities and health fairs. During this activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.//2009//

Health Systems Capacity Indicator 03: *The percent State Childrens Health Insurance Program (SCHIP) enrollees whose age is less than one year during the reporting year who received at least one periodic screen.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	NaN	3.0	57.9	70.8	91.7
Numerator	0	731	14051	15489	5403
Denominator	0	24374	24269	21886	5891
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

The children less than one year old represent about 1.6% of the eligible population and 1.5% of the total insured population.
Assuming that the SCHIP funds are used to pay the population between 101 thru 200 SPL, the total eligible population was 350,825 and the total insured population was 379,025.
The numerator and denominator represent the 1.5% and 1.6% of children under 1 year old between 101 thru 200 eligible and insured for the GIP, respectively.

Notes - 2006
Data represents the GIP infant population. It was provided by the Health Insurance Administration (ASES).
The numerator is the number of infants who received at least one initial screening service according to the EPSDT. The denominator is the total number of eligible infants enrolled in the GIP for year 2006. Since ASES do not provide the number of Medicaid and SCHIP individually, the reported data includes GIP participants less than 1 year old.

Notes - 2005
Data represents the GIP population only. It was provided by the Health Insurance Administration (ASES). The numerator is the estimated number of infants who received at least one initial screening service according to the EPSDT. The denominator is the total number of infants enrolled in the GIP for FY 2004-2005.

Narrative:
/2009/ SCHIP Program benefits became available to Puerto Rico in 1998. This program allows States and territories to choose from three different options to expand medical insurance coverage to uninsured children who do not qualify for Medicaid benefits. These are: establishing a new independent children's health insurance program, expanding current Medicaid Programs, or a combination of both strategies.

Infants may be considered eligible for medical insurance sponsored by SCHIP funds even though their mothers may not be Medicaid eligible. The PR Medical Assistance Program will consider children whose families incomes are above 100% SPL but below the 200% income level established for Medicaid eligibility to be eligible to receive the GIP sponsored with SCHIP funds. This determination allows infants whose family income is too high to make them Medicaid eligible but too low to have a private insurance plan, the benefit of receiving GIP sponsored medical insurance.

SCHIP funds received during FY 2007 experienced a slight increase compared to those allotted during FY 2006 ($42.5 million vs. $41.1 million).

Determining the percent of SCHIP enrollees less than one year old who received at least one initial periodic screen is particularly difficult since our current health care model is a capitated managed care system and therefore claims are not itemized nor separated by funding source. SCHIP funds are not sufficient to cover the expense associated with providing the GIP to all SCHIP eligible children. For this reason, a combination of state, federal (Medicaid) and local funds (municipal) finance health care for children with incomes in the 100-200% SPL range.

It is not possible to obtain the exact number of infants that received services through the SCHIP funds. For this reason, we used the percent of infants between 101 and 200% SPL covered by GIP. This proportion represents 1.6% of the insured population. According to this percent, we estimate that 5,403 of 5,891 infants received services through the SCHIP funds.

The SSDI Program continues to work to ensure the MCH Division has access to accurate, real time data from ASES to monitor this HSCI. In addition, SSDI staff continues to focus on improving the data linkages between birth records and Medicaid eligibility files. These files also include data for SCHIP eligible participants.

Backed by laws that establish newborn metabolic and hearing screening as mandatory, PR has been able to provide the vast majority of its infants with at least one periodic screen included in the EPSDT schedule. The most frequent screening test provided to infants born in Puerto Rico is the newborn metabolic screening test. During fiscal year

2006-2007, 48,063 out of the 48,140 registered live births during that time were screened. This figure represents 99.8% of all live births during the reporting year. Preliminary data indicates that 44,965 out of 46,096 (97.5%) newborns born in 2007 were screened for hearing loss.

During their daily activities, CHW, HVN and perinatal nurses in the eight Health Regions educate parents on the content of adequate pediatric care and encourage them to demand it for their children. Medicaid staff also promote the same message when they participate in activities and health fairs. During these activities they attempt to identify people without health insurance, enroll them in the GIP and assist them in obtaining adequate care.//2009//

Health Systems Capacity Indicator 04: *The percent of women (15 through 44) with a live birth during the reporting year whose observed to expected prenatal visits are greater than or equal to 80 percent on the Kotelchuck Index.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	83.2	84.2	81.6	81.9	82.8
Numerator	24729	25799	36810	22412	29299
Denominator	29723	30655	45130	27368	35374
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
The Kotelchuck Index is a composed indicator to measure adequacy of prenatal care. It uses two crucial elements obtained from birth certificate data: the date when prenatal care began (initiation) and the number of prenatal visits until delivery. Data for 2005 is final.

Numerator: data provided by the Office of Informatics and Technology Advances (OIAT) of the PR Department of Health.
Denominator: data provided by the Office of Informatics and Technology Advances (OIAT) of the PR Department of Health.

Notes - 2005
The Kotelchuck Index is a composed indicator to measure adequacy of prenatal care. It uses two crucial elements obtained from birth certificate data: the date when prenatal care began (initiation) and the number of prenatal visits until delivery.
Data reported for 2005 is preliminary.

Numerator: data provided by the Office of Informatics and Technology Advances (OITA) of the PR Department of Health.
Denominator: US Census.

Narrative:
/2009/ The Kotelchuck Index is an indicator frequently used to determine the adequacy of the prenatal care the mother received. It is calculated using three distinct fields: the date of the last menstrual period, the number of prenatal visits (and when they started), and the date of birth. Currently, the MCH Program uses data provided in the birth certificate to calculate the Kotelchuck index.

Preliminary 2007 birth certificate data was used to calculate the percent of women 15 through 44 years with a live birth whose observed to expected prenatal visits are greater or equal to 80% on the Kotelchuck Index. The result showed 82.8% of pregnant women fulfilled these criteria. The percent of women with a live birth during 2006 that had an adequate or adequate plus prenatal care according to the Kotelchuck Index increased with age. It was 62.9% for the 10 to 14 years age group, 72.1% for those 15 to 17 years of age, 74.2% for those between 18 to 19 years, 82.9% for those 20 to 34 years and 87.8% for those 35 years or more.

Although this indicator was lower than expected in 2005 (81.7%) and 2006 (81.6%) this reduction was probably the consequence of the implementation of the 2005 revised birth certificate, since it changed the format used to obtain the information required to calculate this health indicator. Some fields used to calculate the Kotelchuck Index are self reported and therefore subject to reliability issues.

The adequacy of prenatal care based on the time PNC was initiated can also be evaluated using information from the Home Visiting Program, WIC and the PRAMS like ESMIPR study. The MCH Division monitors 15 health indicators on an annual basis and determines the Integrated Index of Maternal and Child Health by municipality (IIMCH). This allows us to track the MCH health status by municipality and health region, helping us to identify those sectors of PR that need interventions to consequently improve their health. During 2006, pregnant women in 70.5% of all municipalities (n=55) received adequate prenatal care (Kotelchuck Index greater than or equal to 80% of prenatal visits during pregnancy), as recommended by ACOG.

Preliminary birth certificate data for 2007 reveal early PNC rate remains at 82%. We have continued our efforts to promote early PNC admission. Our staff is always on the lookout for pregnant women without PNC. Since the adolescent group has the lowest percentage of adequate PNC, they are being targeted as the number one priority. Pregnant teens are being searched for, guided and supported until they initiate prenatal care provided by an obstetrician. Once they are enrolled in the HVP, nurses visit them regularly and monitor their compliance with the PNC Guidelines established by the PRDoH. Meetings with key collaborators are being coordinated to implement the protocol developed to eliminate the barriers adolescents face when they suspect they are pregnant and attempt to enroll into PNC early. Other pregnant women without PNC are also receiving the same case management/care coordination interventions to ensure they are admitted into PNC immediately.

The MCH Program is constantly carrying out educational interventions where we stress the importance of early and adequate prenatal care as well as compliance with the prenatal care guidelines established by the Department of Health and ACOG. Special emphasis will be given to disseminating information about the early signs and symptoms of pregnancy and the need to request prenatal health care as soon as pregnancy is suspected.

The State System Development Initiative (SSDI) will train data abstractors to collect the hospital record information needed for a study to evaluate the impact the implementation of the 2005 revised birth certificate has had on PNC related VS data used to calculate this indicator. Once the study is completed, we will be able to judge if the changes in PNC rates are real or an artifact. Once we have several more years of experience with the new

birth certificate we will be able to judge if this trend is real and not only due to changes in the data gathering process.//2009//

Health Systems Capacity Indicator 07A: *Percent of potentially Medicaid-eligible children who have received a service paid by the Medicaid Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	13.3	16.5	96.9	95.5	96.7
Numerator	61523	98891	568857	535239	506826
Denominator	462586	599177	587041	560295	524288
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Data provided for this performance measure for the year 2006 was using as numerator the total number of children 1-20 years old who received services through the GIP. The denominator was the number of children 1-20 years of age potentially eligible for the GIP for the corresponding year. The data was provided by the PR Health Insurance Administration (ASES).

Notes - 2005
Data provided for this performance measure was estimated using as numerator the total number of children 0-19 years old who received EPSDT services throught the GIP during FY 2003-2004. The denominator was the number of children 0-19 years of age holding the GIP. The data was provided by the Health Insurance Administration.

Narrative:
/2009/ During FY 2007, Puerto Rico used $1,534.1 million to purchase the GIP for persons whose income was 200% below the established State Poverty Level. Medicaid dollars contributed $169.8 million (11.1%) and SCHIP funds $42.5 million (2.8%) to the total amount of funds used to purchase medical insurance for this group. State and municipal funds were used to cover the remaining costs associated with providing the GIP benefits to all those below the 200% SPL.

The GIP is administered by the Health Insurance Administration (ASES, Spanish acronym). The information used to report this HSCI comes from the ASES information system database. Their data is based on GIP participants' utilization data. The way in which the ASES database is structured makes it difficult for us to calculate exactly the number of children who received services paid exclusively by Medicaid funds. At this time, the MCH Program is using the total of children and adolescents with the GIP as a proxy for Medicaid participants. ASES reports a total of 531,190 children between one and 21 years of age received services during FY 2007. This represents approximately 96.7% of all GIP eligible children received services paid by Medicaid. This represents a 1.3% increase when compared to FY 2006 (95.5%). Paid services include visits to providers, specialists or

dentists, hospital visits, laboratories, ancillary services and pharmacies. It is important to note that not all the parents of children that qualify for the GIP actually enroll them, get their insurance card and access the services included in the benefit package.

The MCH Program, CHW and HVN are constantly reaching out to infants, children and families without health care insurance and referring them to the Medical Assistance Program to undergo an evaluation to determine eligibility. These professionals referred 187 HV participants to the Medical Assistance Program.

Compliance with EPSDT guidelines is also strongly urged by MCH staff in all their interventions. The Patient Advocate Office is also strongly recommending compliance with the preventive pediatric guidelines adopted by the Department of Heath.

The SSDI Program has met with ASES to try to identify ways in which their data collection system can be modified in order to help us obtain more specific accurate information to report for this indicator.//2009//

Health Systems Capacity Indicator 07B: *The percent of EPSDT eligible children aged 6 through 9 years who have received any dental services during the year.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Indicator	NaN	29.7	36.5	60.3	48.7
Numerator	0	87391	52439	64311	54343
Denominator	0	294373	143580	106721	111501
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
The numerator represents the EPSDT eligible children aged 6 through 9 years who received any dental services for the year 2006. The denominator represents all EPSDT eligible children aged 6 through 9 years for the year 2006. These numbers are unduplicated and the Health Insurance Administration (ASES, Spanish acronym) was provided it.

Notes - 2005
All EPSDT eligible children (0-100% FPL) hold the GIP, as well as those in the FPL 101-200%. Both of these groups have direct access to dentists. However, it is quite difficult to estimate the proportion of children 6 through 9 years of age who have received a dental service during any year. In the past year, the collected and reported information was related to the number of encounters or visits for dental services. Since a child may have more than one visit per year, the number of encounters was not appropriate to estimate the percent of children who use dental services in Puerto Rico.

This year, the number provided by the GIP administration (ASES) is the unduplicated number of

children 6 to 9 years who received at least one dental service. That is the reason that explains the decrease in this annual indicator.

Narrative:
/2009/ Having good oral health is important for the overall health and well-being of children; therefore, monitoring changes in this measure is important for the MCH Division. During past years, dental caries have been the most common chronic childhood condition reported in Head Start enrollees. For the school year 2006-2007, caries were the most prevalent condition followed in second place by asthma. During that year, 34.0% of the participants had caries and 17.9% had asthma. This represents a slight decrease from the rates reported for 2005-2006, when 43.4% of the enrollees had caries and 22.5% asthma.

In Puerto Rico, all EPSDT eligible children whose family incomes are below 200% State Poverty Level qualify for the medical insurance benefits covered by the GIP. The GIP includes dental benefits for all the children that hold this medical insurance coverage.

During CY 2007, ASES reported there were 111,501 EPSDT eligible children ages 6 through 9 in Puerto Rico. Among them, 54,343 received any dental service. This number represents 48.7% of all EPSDT eligible children. There was a reduction of 19.2% in this HSCI when compared with CY 2006.

The MCH Program conducted a study to assess the oral health status of a representative sample (1,995) of third grade students. This evaluation was done in collaboration with the Department's Oral Health Division and the School of Dentistry of the University of Puerto Rico. Results showed that 17% of third grade student had evidence of a dental sealant. Statistically significant differences were identified by insurance plan and school type (private vs. public). It became apparent during the study that despite the fact that dental services are covered by the GIP for EPSDT eligible children, they were not taking advantage of this benefit. Some of the access barriers identified were lack of education in the general public regarding this benefit and the reluctance of general dentists to treat young children. In order to address the first barrier, we are disseminating the results of the study among dental and health care providers. In collaboration with the DoH Oral Health Program a brochure was prepared to disseminate information regarding healthy oral health practices and the dental benefits included as part of the GIP. It was distributed during the study and will continue to be distributed by MCH staff and other collaborators in activities held at the community level. To address the second barrier, an MCH Dental Health Clinic was established in the PR Medical Sciences Campus. It will provide general dentists the opportunity to have hands-on learning experience on techniques that can be used to manage pregnant women and young children. It is expected that by participating in it, general dentists will be more willing to treat these cases in their clinics.

During CY 2007, there were 1,379 dentists providing services to GIP participants. However, they are not distributed evenly throughout the Island. About 38.2% were located in the Greater SJ Metropolitan Area and only 12% provide services to Southwest and Southeastern Regions. We calculate that in the southeastern region of PR there are 176 eligible GIP children per dentist and that in the southwest the rate was 151 children per dentist.//2009//

Health Systems Capacity Indicator 08: *The percent of State SSI beneficiaries less than 16 years old receiving rehabilitative services from the State Children with Special Health Care Needs (CSHCN) Program.*

Health Systems Capacity Indicators Forms for HSCI 01 through 04, 07 & 08 - Multi-Year Data

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Indicator	0	0	0	0	
Numerator					
Denominator					
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					Yes
Is the Data Provisional or Final?				Final	Final

Notes - 2007
PR does not receive SSI funds. Therefore no data can be reported of this HSCI.

Notes - 2006
PR does not receive SSI funds. Therefore no data can be reported for this HSCI.

Notes - 2005
PR does not receive SSI funds. Therefore no data can be reported for this HSCI.

Narrative:
/2009/ Puerto Rico does not recieve SSI funds. Therefore, no data can be reported for this HSCI.//2009//

Health Systems Capacity Indicator 05A: *Percent of low birth weight (< 2,500 grams)*

INDICATOR #05 *Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State*	YEAR	DATA SOURCE	POPULATION		
			MEDICAID	NON-MEDICAID	ALL
Percent of low birth weight (< 2,500 grams)	2007	payment source from birth certificate	13.2	11.4	12.6

Notes - 2009
Datra obtained form OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the population without GIP.

Narrative:
/2009/ Puerto Rico is not able to classify birth weight by Medicaid and Non-Medicaid population. This is mainly due to the way the GIP is financed. Medicaid funds PR receives are capped and not enough to provide all Medicaid eligible population the GIP medical insurance benefit. Therefore, a significant amount of state and municipal funds must be expended to purchase medical insurance benefits for all the population with incomes below 200% SPL. All of this plus the fact that the GIP uses a capitated managed care system model makes it difficult for ASES to separate claims data generated by Medicaid vs. Non-Medicaid population and for us to calculate this HSCI.

In order to determine birth weight by income level, the MCH Program uses the GIP participants (those with incomes below 200% SPL), as a proxy of Medicaid participants

and Non-GIP for the Non-Medicaid. The information regarding the pregnant women's health plan at the moment of delivery is included in the birth certificate.

Based on these categories, the MCH Program estimates that the proportion of low birth weight babies (LBW) born to mothers holding GIP card was higher than Non-GIP babies (13.2% vs. 11.4%, respectively). The percent distribution of low-birth weight among Medicaid and non-Medicaid infants maintains the same trend as in previous years. It continues to be higher among the Medicaid group.

In 2006 VS data revealed a LBW rate of 13.0%. LBW rates increased from 10.8% in 2000 to 13.0% in 2006. Premature births also increased from 16.2% in 2000 to 19.9% in 2006. Preliminary birth certificate data for 2007 revealed a slight decrease in the LBW rate (12.6%).

The MCH Division uses other data sources to monitor LBW rates and to identify factors that may be contributing to the increasing LBW rate in Puerto Rico. Among them are the ESMIPR (PRAMS-like), descriptive studies, birth certificates and data linkages between birth and death files. Among those who participated in the 2006 ESMIPR survey, 11.5% had a LBW infant.

Since 2007 the MCH Program has been actively involved with the March of Dimes sponsored PR Prematurity Taskforce (PRPT) activities. This taskforce was established to review available data, identify risk factors that contribute to the increase in PR of the preterm birth rate and recommend a strategic plan to reduce prematurity rates and the mortality and morbidity associated with it. It has already established 4 main objectives to guide their work during 2008. These are: 1) identify the causes leading to premature births and those best practices interventions and prevention management strategies that are available to reduce them, 2) increase the level of awareness of our high LBW rate among health care professionals and community members, 3) promote that members of various sectors integrate and establish a common vision that will lead to collaborative efforts, and 4) promote public policies and effective programs.

Efforts to improve these indicators are conducted by the MCH Program. Through the Home Visiting Program, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors. Our HVN help home visiting participants to quit smoking. The Preconceptive Health Committee will work to improve the health status of diabetic women in child bearing age in order to improve the outcome of future pregnancies. CME activities directed at promoting the cardiovascular heart of WCBA will be provided to PCP and nurses during 2008. The basis for these trainings will be the Heart Truth curriculum which urges health professionals to talk to women about heart disease, assess their risk and motivate them to take action to reduce their risk.

Since disorders related to length of gestation and fetal growth are the first cause of infant mortality in Puerto Rico, establishing a FIMR will also help us identify some local factors that may be contributing to the increase in LBW.//2009//

Health Systems Capacity Indicator 05B: *Infant deaths per 1,000 live births*

INDICATOR #05 *Comparison of health system capacity*	**YEAR**	**DATA SOURCE**	**POPULATION**		
			MEDICAID	**NON-MEDICAID**	**ALL**

indicators for Medicaid, non-Medicaid, and all MCH populations in the State					
Infant deaths per 1,000 live births	2006	payment source from birth certificate	8.9	8.2	8.7

Notes - 2009
Datra obtained form OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

Narrative:
/2009/ In PR, state and municipal funds are combined with Medicaid and SCHIP funds to finance the GIP for low-income individuals (below 200% SPL). The MCH Program is unable to differentiate between infants delivered to Medicaid insured mothers from those who were delivered to women whose GIP health insurance was funded with non Medicaid funds. For that reason, the MCH Program uses the GIP participants as a proxy for Medicaid participants when calculating this indicator.

The MCH Division is able to determine the type of insurance of infants that died by linking birth and death certificates. In 2006, the infant mortality rate for PR was 8.7 infant deaths per 1,000 live births. For the same year, the IMR for the Medicaid group was 8.9 deaths per 1,000 live births. Although preliminary data for 2007 show an IMR of 5.2/1,000 live births and rates of 4.1 for the Medicaid population and 3.3 for the non Medicaid population, it is our experience that these are the indicators that are more likely to change when we report final data. Therefore, we will report 2006 data for this HSCI. The PR 2010 HP goal is to have no more than 6.2 infant deaths per 1,000 live births.

Most of the infant deaths occur in the neonatal period. The first causes of death for this group are disorders related to length of gestation and fetal growth. Premature births and low birth weight rates increased slightly by about 1.0% and 1.5% respectively from 2005 to 2006.

Collaborative efforts with the March of Dimes PR Chapter will allow us to monitor and disseminate information on IM trends and contributing factors for these two main causes for IM. The MCH Program is actively collaborating with the Puerto Rico Prematurity Taskforce (PRPT) whose main objective is to decrease the rate of premature births. SSDI shared information regarding IM, VS and other MCH indicators with editors of the KIDS COUNT Data Book. This publication provides policymakers and citizens in general with data on benchmarks that are associated with child well-being and can be used to inform local, state and national discussions regarding ways to secure better futures for all PR children.

The MCH Home Visiting Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing these rates by focusing on women who have nutritional risk factors.

The PR Healthy Start Project has taken the lead in planning and implementing a Fetal and Infant Mortality Review (FIMR) project in PR. The MCH Infant Mortality Committee will serve as the Case Review Team for the project. The FIMR Project will begin by reviewing infant deaths occurring in the Mayagüez and Ponce Health Regions, since they have the highest IMR in PR. The Case Review Team (CRT) and the Community Action Team (CAT) have been identified. The FIMR Manual, which establishes the roles, responsibilities and procedures, has been developed, and the staff that will implement the project has been

identified. We have also translated and revised the Home Interview and Data Abstraction Forms. The initial orientation for the FIMR Planning Team took place in September 2007. In October 2007, we had the first training session for the Planning Team and the HVNs who will perform the home interviews. Letters requesting collaboration were sent to all hospitals serving the Mayagüez and Ponce regions where the pilot project is being developed. Most hospitals have signed the agreement and the PRHSP staff has been visiting the hospitals to present the project to the nursing staff. The first IM cases have been reported by participating hospitals.

In June 2008, we had a 2-day technical assistance visit from the Contra Costa Health Services FIMR Coordinator. She offered intensive training on FIMR procedures, bereavement and maternal interview for our nurses and staff. In addition, she was the keynote speaker for the FIMR project kickoff, attended by representatives of hospitals and other entities that are involved in the project.

The MCH Program staff continues to provide educational interventions directed at HVN, providers and the population at large in order to increase awareness of the elevated LBW PR is experiencing and its implication for these infants' survival. During the activities, staff encourages WCBA to abstain from high risk behaviors such as smoking during pregnancy and offer recommendations to reduce this behavior as well as other factors that contribute to poor outcomes.

The Healthy Start project plans to conduct a study to identify which risk factors may be contributing to the higher infant mortality rate in the southern part of PR when compared to the IM in the northern part of the Island.//2009//

Health Systems Capacity Indicator 05C: *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester*

INDICATOR #05 ***Comparison of health system capacity indicators for Medicaid, non-Medicaid, and all MCH populations in the State***	**YEAR**	**DATA SOURCE**	**POPULATION**		
			MEDICAID	**NON-MEDICAID**	**ALL**
Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester	2007	payment source from birth certificate	75.8	88	82

Notes - 2009
Datra obtained form OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the infants without GIP.

Narrative:
/2009/ Puerto Rico Medicaid funds are allotted differently for PR than for the states. In contrast with what happens statewide, our Medicaid funding level is capped. In 2007, its funding level was $169.8 million. In order to cover the expenses associated with providing medical insurance for those with incomes below 200% SPL, Puerto Rico combines state and municipal, Medicaid and SCHIP monies.

In 2005, the PR Demographic Registry implemented the newly revised birth certificate

which contains information on payment method. To calculate this indicator we used GIP insured as a proxy for the Medicaid group. Those categorized as non-GIP usually finance these services using private insurance, self-pay or by receiving pro bono services. This new version of the birth certificate does not collect information regarding the month when prenatal care began. Therefore, we used information from the following two fields to calculate this HSCI: the last menstrual period and date of first prenatal visit.

In 2007, 82.0% of births were delivered to mothers who initiated prenatal care during the first trimester of pregnancy. This represents an increase of 7.4 points when compared with the previous year's rate. This increment is similar for both groups, GIP and Non-GIP (about 3 to 4 points). Although the trend has been positive for both group since 2005, the difference between them was statistically significant. Only the Non-GIP population reached the PR Healthy People 2010 goal of 86%.

According to the 2006 ESMIPR survey, 92.0% of the births included in the sample received prenatal care in the first trimester. Comparing the results of the 2004 and 2006 surveys, we noted a 4% increase in the early PNC rate among GIP participants. This rate was reported to be 86% in 2004 and 90.0% in 2006. The percent for the Non-GIP participants remains essentially the same at 96%. On the other hand, the gap between GIP and non-GIP participants is narrowing. For 2006, the difference between the two groups was 6 points while for 2004 was 10 points.

ESMIPR data is different from that obtained from the birth certificate data. A possible explanation for this is the elevated (11.7%) non response rate in birth record fields that register last menstrual period and date at which prenatal care began. The SSDI Program is conducting a study to evaluate changes in the maternal and newborn health indicators associated with the implementation of the revised birth certificate. The study will attempt to determine if the changes in perinatal indicators are real or secondary to incomplete data in the birth certificate. As part of the study a total of six hundred 2006 birth certificate records will be reviewed and analyzed. Data from these records will be compared to the information registered in the hospital record. The study will allow us to identify incongruencies among the two data sources.

In 2005, a study was performed to identify reasons women who entered prenatal care after the first trimester gave to explain their late arrival for care. Among the main causes identified were personal barriers (i.e. lack of awareness of pregnancy, psychosocial factors); a combination of personal and system barriers (transportation problems, lack of health insurance coverage); and health care delivery system barriers (the time lapse between requesting prenatal care and the actual admission to prenatal health services).

Aware these barriers exist, MCH staff is constantly on the lookout for pregnant women, particularly adolescents, without prenatal care. When one is identified, they must immediately refer her to the GIP Offices and to obstetrical providers' offices to ensure they begin their PNC before the end of their first trimester.//2009//

Health Systems Capacity Indicator 05D: *Percent of pregnant women with adequate prenatal care(observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])*

INDICATOR #05	**YEAR**	**DATA SOURCE**	**POPULATION**		
Comparison of health system capacity indicators for Medicaid,			**MEDICAID**	**NON-MEDICAID**	**ALL**

non-Medicaid, and all MCH populations in the State					
Percent of pregnant women with adequate prenatal care(observed to expected prenatal visits is greater than or equal to 80% [Kotelchuck Index])	2007	payment source from birth certificate	74.5	85	82.8

Notes - 2009
Datra obtained form OIAT of the PR Dept of Health. Medicaid percentage represents the population covered by the Government Insurance Plan. Non Medicaid population represents the population without GIP.

Narrative:
/2009/ As mentioned previously, due to the way in which GIP is financed, the Medicaid cap and the capitated managed care system model adopted by the GIP, it is very difficult for us to differentiate between services provided under Medicaid from those that are not. The MCH Program uses GIP participants as a proxy for Medicaid participants and Non-GIP for Non-Medicaid participants.

The adequacy of prenatal care is measured, as in HSCI 4, as the percent of women (ages 15 through 44) with a live birth during the year whose observed to expected ratio of prenatal visits is greater than or equal to 80% on the Kotelchuck Index. In 2006, 72.2% of infants were delivered to women who had adequate prenatal care. This rate increased to 82.5% for mothers that were not Medicaid insured. Preliminary 2007 data reveals 74.5% of Medicaid infants and 85.0% non-Medicaid infants' mothers had adequate PNC. Thus, the proportion of infants whose mothers had received adequate prenatal care, as defined by the Kotelchuck Index, increased slightly for Medicaid infants and non-Medicaid infants.

The MCH Program staff is constantly disseminating messages on the importance of initiating PNC as soon as pregnancy is suspected and complying with the established guidelines for prenatal care.//2009//

Health Systems Capacity Indicator 06A: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Infants (0 to 1)*

INDICATOR #06 **The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL Medicaid**
Infants (0 to 1)	2007	100
INDICATOR #06 **The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL SCHIP**
Infants (0 to 1)	2007	200

Notes - 2009
Data for 2007 provided by the Medical Assistance Program (Medicaid Program).

The percent of poverty level is a State Poverty Level.

Notes - 2009
Information provided by the Medicaid Program for year 2007.

An attachment is included in this section.

Narrative:
/2009/ Because Puerto Rico is a territory and not a state, Medicaid funding has been capped since 1968. During FY 2006 and 2007, PR received the same amount of Medicaid funds. They amounted to $169.7 million per year. Although between 1998 and 2003 Medicaid funds increased by 65% in the USA, in PR they increased by only 30%. Medicaid funds alone are insufficient to provide services for all Medicaid eligible children; therefore, funding used to purchase the Government Insurance Plan (GIP) for low-income individuals is a combination of state and local funds (municipal), Medicaid and SCHIP. PR has not modified eligibility criteria, despite recent economic hardships and reduced revenues.

Prior to qualifying a patient, the PR Medical Assistance office staff evaluates family income sources such as salaries, other received benefits, land, boats, cars and housing ownership, bank account statements, lottery winnings, and expenses (alimonies, medical expenses and utilities and telephone bills, etc.). Once this evaluation is concluded, Program staff determines the net income of the person according to the defined State Poverty Level (SPL). If the net income for each individual does not exceed $800 (200% SPL) they will qualify for the GIP. This SPL was set based on cost of living expenses for PR. (see attachment Table III-1 State Poverty Level).

Medicaid funds are used to cover infants whose incomes are below 100% SPL while SCHIP funds are used to provide insurance coverage for children whose income is between 101% and 200% SPL.

Infants born of mothers insured by the GIP are automatically enrolled. This automatic enrollment lasts for the first six months of life or until the mother returns to be re-certified, whichever comes first. The newborn coverage includes ambulatory services and subsequent hospitalizations if needed.

Mothers not insured by the GIP must visit one of the Medicaid Program Offices for an evaluation to determine if they qualify for this benefit. Those who qualify for the GIP will have their newborns covered for six months. Once this time elapses, the mother needs to be recertified in order to continue to receive the GIP insurance coverage. In some situations where additional income can be documented, family benefits may be eliminated or limited to a three-month period.

Newborns may be eligible for SCHIP program even when their mothers are not Medicaid eligible. The Medicaid Program will consider children of families with incomes above the 100% but below 200% SPL for GIP coverage using SCHIP funds. This protects families with incomes too high to make them Medicaid eligible but too low to have a private insurance plan.

For FY 2007, there were about 29,906 infants eligible for the GIP, 17.8% more than FY 2006 (25,393).

The MCH Program, CHW and HVN will continue reaching out to infants, children and families without health care insurance and referring them to the Medicaid Program to undergo an evaluation to determine eligibility. During CY 2007, HVN referred 187 participants to the Medical Assistance Offices.//2009//

Health Systems Capacity Indicator 06B: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Medicaid Children*

INDICATOR #06 **The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL Medicaid**
Medicaid Children (Age range 1 to 18) (Age range to) (Age range to)	2007	100
INDICATOR #06 **The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL SCHIP**
Medicaid Children (Age range 1 to 18) (Age range to) (Age range to)	2007	200

Notes - 2009
Data for 2007 provided by the Medical Assistance Program (Medicaid Program).

The percent of poverty level is a State Poverty Level

Notes - 2009
Information provided by Medicaid Program for year 2007.

Narrative:
/2009/ In Puerto Rico, the GIP is considered a proxy for Medicaid. Uninsured children whose family incomes are 200% below State Poverty Level qualify for the Government Insurance Plan. Funds used to purchase the GIP come from state, local municipalities, Medicaid and SCHIP.

The Medical Assistance Program is responsible for determining eligibility criteria based on income level. Medicaid funds are used to provide GIP benefits for children whose families' incomes are 100% below SPL. Meanwhile, children living in families whose income is in the 100-200% SPL range can also get the GIP using SCHIP funds.

Qualifying income levels are significantly different in PR from those in the mainland. For example, a family of two (mother and child) with an income of $990.00 per month is considered to be 200% below the SPL and therefore the child would be eligible for SCHIP sponsored GIP insurance.

Currently, the Medicaid Program and the Health Insurance Administration (ASES) project that next year there will be an increase in the number of GIP eligible children due to the economic recession. They estimate for every 1,000 new GIP beneficiaries ASES, will need $1 million additional dollars to cover the expense.

SSDI, in collaboration with the OITA, has been linking birth and Medicaid eligibility records. Currently, the process is being reviewed in order to accurately link them, and analyze their profile in order to identify children without a health insurance plan who could potentially benefit from the Medicaid or SCHIP funded GIP.

The PR MCH staff's main role is to provide information to low income children and their families about the GIP benefits and provide them referrals to the Medical Assistance Offices so they can be qualified to receive the services. HVN and CHW referred 187 HVP

participants to the Medical Assistance Offices Program.//2009//

Health Systems Capacity Indicator 06C: *The percent of poverty level for eligibility in the State's Medicaid and SCHIP programs. - Pregnant Women*

INDICATOR #06 **The percent of poverty level for eligibility in the State's Medicaid programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL Medicaid**
Pregnant Women	2007	100
INDICATOR #06 **The percent of poverty level for eligibility in the State's SCHIP programs for infants (0 to 1), children, Medicaid and pregnant women.**	**YEAR**	**PERCENT OF POVERTY LEVEL SCHIP**
Pregnant Women	2007	

Notes - 2009
Data for 2007 provided by the Medical Assistance Program (Medicaid Program).

Notes - 2009
For year 2007: Pregnant women do not receive services paid by SCHIP funds.

Narrative:
/2009/ In Puerto Rico, pregnant women with household incomes 100% below SPL qualify for Medicaid and the GIP. Pregnant women with household incomes 200% below SPL receive GIP medical insurance coverage sponsored by combined state and municipal funds. Income levels in PR are significantly different from those in the mainland and for this reason the Medical Assistance Program has established a State Poverty Level (SPL). In order to determine eligibility, the Medical Assistance Program carefully reviews documents with information on family income and expenses. It is important to note that despite the difficult economic situation, PR has not changed eligibility criteria for pregnant women.

Obstetrical services are part of carve-out services excluded from the capitated managed care system model. However, in order to qualify and be included in this special OB coverage, the woman must provide the certifying official a positive serological test confirming the pregnancy. Once they are qualified for the OB GIP benefits, they are free to choose an obstetrician and make an appointment to initiate their PNC.

In 2005, a survey was undertaken by SSDI to study factors that contributed to women entering PNC late or not seeking care at all. The main reasons these women gave for arriving late were: in first place, being unaware of their pregnant status (64.7%) and in second place lack of health insurance at time of conception (21.1%).

Pregnant teens are the group that faces the greatest challenges when attempting to initiate PNC early, since many of them are: unaware of their pregnancy; face financial difficulties when they attempt to get their pregnancy test done; and transportation challenges when they attempt to visit medical Assistance Offices. Since they represent the group with the lowest percentage of adequate PNC, they have become our number one priority. Pregnant teens are being searched for, guided and supported until they initiate prenatal care with an obstetrician. Meetings with key collaborators are being coordinated to implement the protocol developed to eliminate their main barrier to PNC which is obtaining the pregnancy test.

The MCH Program, CHW and HVN are constantly reaching out to pregnant women without health care insurance and referring them to the Medical Assistance Program to be evaluated and qualified for GIP benefits. However, regardless of their insurance status, they are also helped to initiate PNC care before the end of their first trimester. About 187 HV participants were referred to the Medical Assistance Program, according to the Home Visiting Program Report.//2009//

Health Systems Capacity Indicator 09A: *The ability of States to assure Maternal and Child Health (MCH) program access to policy and program relevant information.*

DATABASES OR SURVEYS	**Does your MCH program have the ability to obtain data for program planning or policy purposes in a timely manner? (Select 1 - 3)**	**Does your MCH program have Direct access to the electronic database for analysis? (Select Y/N)**
ANNUAL DATA LINKAGES Annual linkage of infant birth and infant death certificates	3	Yes
Annual linkage of birth certificates and Medicaid Eligibility or Paid Claims Files	3	Yes
Annual linkage of birth certificates and WIC eligibility files	1	No
Annual linkage of birth certificates and newborn screening files	1	No
REGISTRIES AND SURVEYS Hospital discharge survey for at least 90% of in-State discharges	1	No
Annual birth defects surveillance system	3	Yes
Survey of recent mothers at least every two years (like PRAMS)	3	Yes

Notes - 2009
For year 2007.

PR conducts the Maternal and Infant Health Study, a PRAMS-like survey, every other years.

Narrative:
/2009/ The MCH program has a staff of public health professionals with expertise in the fields of demography, epidemiology, biostatistics, evaluation and data entry that analyze the data and monitor changes in the health status of our target population based on the

analysis of surveillance system data, linked data sets and other MCH relevant surveys. The team consists of one Demographer, who is the Coordinator of the Title V Monitoring and Evaluation Unit (TVME) as well as the SSDI Project, two Epidemiologists, one Evaluator, one Biostatistician, a cultural anthropologist and one Data Entry Clerk. A pediatrician, who is the MCH Acting Director, and an OB/GYN consultant with vast experience in public health provide support to this team. The MCH Director supervises the TVME Unit.

In PR, the Office of Informatics and Technology Advances (OITA) is responsible for developing births, deaths and stillbirths files databases. Annually, they provide us with the linked data bases from the birth and infant death files. They also offer technical support when database management problems are identified.

The SSDI Program is developing an informatics structure that will allow us to collect data in a uniform, ongoing manner. This will facilitate our tracking of the Title V Program indicators.

One of the challenges we are currently facing is obtaining Newborn Screening Program data files that are compatible with live birth database so linkages can occur and match results analyzed. At this time, we are reviewing their information system data fields and recommending changes to make these databases compatible. Therefore, until this is resolved, birth records and newborn screening files will not be linked.

Birth and death certificates are being linked. The process followed for this procedure is as follows: once the death certificate reaches the Vital Records Office, their staff verify the child's birth certificate number and writes it on the death certificate. Then using the SQL program, the algorithm links the certificates in a two step process: first linking by the birth certificate number; second by the infant's first and last name and date of birth. This process creates a dataset from which further analysis can be performed on records that were successfully linked. Those records that did not link are still evaluated manually to verify the possibility of a match missed by this procedure. This linkage procedure is able to capture about 99% of the records.

Since 2004, SSDI Program has electronically linked about 85% of Medicaid eligibility records to live births records. We are reviewing current procedures and contemplating the possibility of modifying them in order to increase successful linking of these two databases to 97% of the cases.

Birth Records and WIC eligibility files are not being linked. In FY 2009, SSDI Program plans to develop the infrastructure needed to link them. We have met with persons responsible for the WIC information system and began analyzing their definitions of the pre-defined variables in order to evaluate and determine which variables would be more appropriate for the dataset.

The Birth Defects Surveillance System was established in 1995. We are currently matching the medical record information their abstractors gather to vital statistics records. In 2005, a total of 235 live births were identified as potential matches. After evaluating them, 121 turned out to be matches and 18 cases were identified as new cases not previously identified by the surveillance system.

PR does not participate in PRAMS; however, we have developed a PRAMS-like survey known as ESMIPR (Spanish acronym). This survey was designed to identify and monitor pertinent perinatal information. This self-administered questionnaire has been administered every two years to a sample of about 1,000 post partum women who had a live birth in one of the hospitals who had had an average of at least 10 deliveries per week in the previous year. This survey was first administered in 2000. ESMIPR data is provided

to the program, public agencies and other interested parties who use it as evidence on which to base their decisions and to develop public policies. ESMIPR data is used to report progress on such Title V performance measures as: early prenatal care, breastfeeding rates, unintended pregnancy, nutrition/folic acid awareness, and alcohol and tobacco use, among others.

Over the years, we have established the mechanisms to get the information we need from other programs of the DoH such as WIC, Medicaid, Immunization, Oral Health Program, ASES, Catastrophic Illness Office and Pediatric AIDS. In addition, we obtain vital information from the Newborn Screening Program, Genetic Counseling Clinics, Insurance Commissioner, Forensic Science Institute, EMSC, Safe Kids, and the Departments of Police, Education, Family and Transportation.//2009//

Health Systems Capacity Indicator 09B: *The Percent of Adolescents in Grades 9 through 12 who Reported Using Tobacco Product in the Past Month.*

DATA SOURCES	Does your state participate in the YRBS survey? (Select 1 - 3)	Does your MCH program have direct access to the state YRBS database for analysis? (Select Y/N)
Youth Risk Behavior Survey (YRBS)	2	No
Monitoring the Future	3	No

Notes - 2009

"Consulta Juvenil VII" (2005-2007) is the Spanish acronym to "Monitoring the Future" a youth survey that in PR is performed by the Administration of Mental Health and Anti-Addiction Services (ASSMCA, Spanish acronym).

Narrative:

/2009/ Many of the high risk behaviors adolescents engage in have the potential of leading to adverse health consequences. In PR, the Youth Risk Behavior Survey (YRBS) and "Consulta Juvenil" (Monitoring the Future) monitor the prevalence of these risky behaviors in adolescents attending schools in PR.

The PR Department of Education contracts a private entity to perform the YRBS every 2 years. The main objectives of the YRBS are to: measure the prevalence of risk behaviors (including use of alcohol, tobacco and drugs) among youth, assess how risky behaviors trends change over time and provide comparable data. This self-administrated survey is completed by students attending the 9th thru 12th grades. In the US, this survey is performed every two years but in PR its administration has been irregular. In PR it was administered in 1991, 1995, 1997, 1999, 2001 and 2005. On three of these occasions (1997, 1999 & 2001) the sample size was not weighted so the results are not representative for the entire public school student population. In 2007, the PR Department of Education did not administer the YRBS survey.

The Administration of Mental Health and Anti-Addiction Services (ASSMCA, Spanish acronym) has been contracting the Central Caribbean University since 1990 to conduct a similar survey entitled "Consulta Juvenil" (Monitoring the Future) every two years. This self-administered survey is administered to a representative sample of the students in public and private schools (elementary, middle and high) in PR. Its purpose is to determine the percentage of students enrolled in 5th to 12th grades who engage in high risk behaviors such as tobacco, alcohol, drug use and premature sexual activity. It also

includes questions directed at identifying the presence factors that are protective and those that increase the risk for these behaviors. The analysis of the data provides information regarding the prevalence and trends for each of the behaviors by age, grade and sex. "Consulta Juvenil" provides data needed to develop public policies and programs directed at preventing or eliminating these behaviors in children and adolescents. The most recent Consulta Juvenil VII was administered during 2005-2007.

Both surveys gather information of tobacco use in the previous month, but since YRBS was not performed in 2007 the data being provided is from Consulta Juvenil. According to Consulta Juvenil VII (2005-2007), 9.9% of students 10th through 12th grades smoked one or more cigarettes in the past 30 days. As in previous years, tobacco use during the previous month was higher in males than females. Smoking increases proportionally to age. As students become older they tend to smoke more. This trend applies equally to both sexes. According to Consulta Juvenil there has been a gradual but steady decrease in tobacco use among students 10th through 12th grades of 58% when comparing Consulta Juvenil's IV (1997-1998) rate of 23.9% to Consulta Juvenil's VII (2005-2007) rate of 9.9%.

This reduction in the number of students who smoke can be attributed in part to the proactive efforts of the Tobacco Coalition. This multidisciplinary and interagency group has been instrumental in the enactment of local laws restricting smoking in public places and increasing the level of awareness among the population regarding the health risks associated with smoking. Law #40 approved in 2007 makes PR a "tobacco-free island", since it prohibits smoking in public places such as restaurants, cafeterias, centers for health services, child care centers or any public or private place that is used to provide care or health services, bars, pubs, discotheques, convention centers, malls, and workplaces, among others. The Coalition disseminates data and smoking cessation messages by publishing a bulletin that goes out to providers and interested parties several times a year.

ASSMCA uses peer mentoring as a strategy to prevent public school students from smoking. The PRDoH Health Promotion Division is implementing "Mi Residencial Libre de Humo" Initiative in elementary schools located in four of the 5 municipalities that have the highest early teen smoke initiation rates. This initiative includes workshops on the following themes: health implications of tobacco use, propaganda, smoking cessation and Law #40. The 2008 Caribbean Tobacco Control Summit allowed experts in the field from various countries to present tobacco prevention strategies to health professionals and the general public. In 2007 MCH staff offered 36 activities to 581 students about the effects of tobacco and second hand smoke.

A Memorandum of Understanding (MOU), signed in April 2008, provides for the sharing of the "Consulta Juvenil" database between the DoH and ASSMCA. Once this information is obtained, SSDI will be able to perform additional in depth analysis related to tobacco use and abuse among students in grades 9th thru 12th.//2009//

IV. Priorities, Performance and Program Activities

A. Background and Overview

The PR MCH needs assessment process is a continuous activity carried out on a year round basis. It is aimed at identifying the specific and changing needs of the different MCH population groups. This activity provides the necessary feedback to readjust the MCH work plan to better respond to changes in health needs of the target population. The needs assessment is geared by the H.P. 2010 national objectives related to the MCH population (Focus Areas 9, 16 and others); national and state performance and outcomes measures, as well as the health status indicators established by the MCHB.

Another complementary activity to the needs assessment is the identification of all activities, services and programs according to the MCH pyramid levels for each of the population groups. These two activities allow us to match MCH health needs with available services and to identify gaps in services that should be filled.

Currently, the Title V program has a section staffed with a well-trained team of professionals whose main task is to gather the most accurate and timely data to monitor the progress of all performance and outcomes measures, as well as the level of progress in improving the health and well-being of the Puerto Rican MCH population.

After that, Title V funds are allocated to complement services, to conduct new activities or to implement new programs that will help us to achieve the established target of performance and long terms outcome measures.

The MCH priorities are determined based on the identified needs, the state capacity to address these needs, the political priorities and input from a broad array of partners including families. The trend analysis for at least five years of the rates of each national and negotiated state performance and outcome measures allow us to set expected targets for future years.

Selection of State Priority Needs:

A total of ten (10) priority needs were selected based on data analysis, number of persons affected, input from collaborators, state political priorities, availability of resources to address identified needs and reliable culturally sensitive treatment or management options.

The Puerto Rico MCH work plan is focused on the following priorities:

1. Improve maternal health.
2. Reduce unintended pregnancies.
3. Improve newborn health.
4. Reduce adolescent pregnancies.
5. Reduce behavioral risk factors among pregnant women and adolescents (smoking, alcohol and substance abuse).
6. Reduce unintentional injuries among children and adolescents.
7. Increase availability and accessibility to preventive and quality primary health care services for the MCH/CSHCN populations.
8. Decrease morbidity and mortality due to bronchial asthma.
9. Improve coordination among health care plans, primary physicians and the Pediatric Centers.
10. Promote successful transition of youth to adult life.

/2007/ No changes in priority needs were considered for this year. //2007//
/2008/ Priority #10 refers specifically to transition of CSHCN to adult life.//2008//
/2008/Based on our ongoing needs assessment, the state priority needs Hill be

reevaluated.//2008//

/2009/ During the past three years, the MCH Division has been gathering data in areas related to children's health. We have identified some emerging issues that are affecting the pediatric population and require our prompt attention. Among these issues are the obesity epidemic, oral health, unintentional injuries, asthma, autism, violence, hearing impairments and mental health. This has led us to broaden our priority #3 to include the pediatric population. Many of these areas are already being addressed by the MCH Division with our current programs and activities and reported in the NPM and SPM. Nevertheless, because these are complex issues with multiple associated risk factors, we recognize the need to partner and establish collaborative efforts to address them. Therefore, we will address these conditions by strengthening our PBS and infrastructure building services.

Priority #3 will be modified to read: Improve the health of the pediatric population.

Modify priority #7 to include specialty services (offered by PCs). It will read as follows: Increase availability and accessibility to preventive and quality primary and specialty health care services for the MCH/CSHCN populations.

Modify priority #10 to read as follows: Promote successful transition of youth with special health care needs to adult life.//2009//

B. State Priorities

Figure IV-1 depicts the relationship among PR's selected priority needs, its capacity and resource capability, the national and State Negotiated Performance Measures and the long term health outcomes set for our mothers, children and adolescents (MCA).

Improving the health status, well being and quality of life of the MCA and their families is a great challenge for the MCH/CSHCN programs. To achieve this goal it is imperative to develop and implement a concerted action plan among a diversity of public agencies, private entities, and CBOs, with the involvement of the families themselves. This is so, because the health status and well being of an individual, or a selected population group, results from the intricate interaction of genetic, environmental and sociodemographic factors. Currently, there is not a single public or private entity with all the resources and capability to address by itself the multiple and complex socioeconomic and health needs of the MCA population. This conclusion is drawn from the comprehensive five (5) years needs assessment of the Puerto Rican MCA population. Their needs are diverse and very complex. The five years needs assessment was performed by means of in-depth analysis of quantitative data collected by the Demographic Registry and the Vital Statistic Office as well as other secondary data sources; by gathering primary and qualitative data; conducting applied research and gathering input through the participation of the MCH/CSHCN staff in hundreds of inter agency meetings, coalitions, commissions, task forces, committees; and through focus groups of different MCA groups. Sadly, this process led us to realize that there is a wide gap between the current MCA health status and well being, and the expected goals set for 2010. In 2003, the IMR was 9.8/1,000 live births compared to the established goal of 4.5/1,000 by 2010. The MMR was 25.5/100,000 live births in comparison to 3.3/1000 by 2010. This ratio is 7.7 times higher than the established goal.

/2008/ In 2005, the IMR was 9.3/1,000 live births compared to the established goal of PR 6.2/1,000 that must be met by 2010. For 2004, according to the Puerto Rico Maternal Mortality Surveillance System, the MMR was 39/100,000 live births in comparison to 6.0 /100,000 to be met by 2010. This ratio is more than 2 times higher than the one reported by the Vital Statistics data (17.6/100,000 live births) for 2004. //2008//

The contributing (or risk factors) to these poor MCA health outcomes are not only in the realm of medical factors but also in the domain of sociodemographic, environmental and behavioral factors. It is imperative to highlight that in the epidemiology of MCH, there are several independent variables such as heredity, race and ethnicity, income, education, marital status, culture, age groups and area of residence, that are not under the control of the primary role of the MCH/CSHCN programs. Additionally, the contributing factors of the epidemiological model of the MCH are immense. These include medical risk factors, obstetric complications, behavioral risk factors and the quality of prenatal, perinatal, postpartum and pediatric care, among others. The interrelationship of both, the determinant and contributing factors, leads to short term (<1 year), intermediate (1-5 years) and long term (5-10 years) MCH outcomes. The priority needs for PR were drawn from the analysis of this MCH epidemiological model and the government's political priorities.

Figure IV-1 represents the PR Title V Block Grant Performance System. It shows at a glance the relationship of selected priority needs with current available services to address them by levels of the MCH pyramid. The National and State Negotiated Performance Measure are grouped by the level of the pyramid, which includes the programs, services or activities that, if properly implemented, would result in achieving its set goals across the years. The cumulative achievements of the National and State Performance Measures should lead us to reach the ultimate goal of the Title V Program: "Improving the health and well-being of all women in their reproductive age, infants, children, adolescents and their families". The measures that will tell us how effective our efforts have been over the years are the maternal, infant and child death rates shown at the end of the PR Title V Measurement System.

After the earlier general description, we would like to be more specific describing the relationship among the priority needs with the components of PR Title V BG Performance Measurement System. Due to space limitations we will focus on the first five priorities.

1. Improving maternal health. Rate of fetal-neonatal and maternal deaths are indexes that reflect the level of maternal health in Puerto Rico. The five (5) years needs assessment showed that half of all women began pregnancy with either a low BMI or at the obese level. This is a risk factor for pregnancy and perinatal complications affecting the mother as well as a risk factor affecting the unborn baby. Similarly, the WIC program reported that the most common reasons for a pregnant woman to be enrolled in the program were obesity or underweight, inadequate weight gain during pregnancy, or anemia.

Most fetal deaths are related to problems associated with maternal health prior to pregnancy, as well as complications arising during the course of the pregnancy and problems related to the quality of care during pregnancy and delivery (fetal asphyxia).

ESMIPR 2004 found a prevalence of 28.4% of pregnant women requiring one to four hospitalizations during her last pregnancy.

/2008/ ESMIPR 2006 found a prevalence of 24.7% of pregnant women requiring one to four hospitalizations during her last pregnancy. //2008//

The most common reasons for these hospitalizations were premature contractions, vomiting and dehydration, urinary tract infections, placental problems and hemorrhage, blood pressure (eclampsia), diabetes, and others. These data do not include a significant proportion of pregnant women with health conditions such as asthma who are adequately managed as outpatient cases.

To address this priority need it is imperative to assure availability and accessibility to pre-pregnancy services (i.e. family planning), early and regular prenatal care, perinatal care rendered at the most appropriate level of service according to the identified risk, postpartum and inter conceptional care. These services are considered direct services according to the MCH pyramid.

The focal area 16 of HP 2010 provides several measures to help us monitoring this priority. These include: objectives 16-4 aimed at reducing maternal death; 16-6 (PM-18) aimed at increasing the proportion of women who receive adequate prenatal care; 16-9 to reduce cesarean section among low-risk women; and 16-17 to increase abstinence from alcohol, cigarette smoking and illicit drug use among pregnant women.

Enabling Services: Among the enabling services are the Home Visiting Program (PR State PM1), the toll-free line, postpartum education provided by perinatal nurses, the WIC program and others.

Population Based Services: At the community level a diversity of educational activities are conducted aimed at creating awareness on several health issues and promoting healthy behaviors among women during pregnancy and the inter conceptional period. These educational activities are reinforced with distribution of written education materials. The importance of maintaining an appropriate weight, the need for an annual check up, the importance of early and regular prenatal and its content are emphasized.

Infrastructure Building Services: The PR Title V program's staff is actively engaged at this level of the pyramid in activities aimed at promoting a decrease in maternal complications and deaths.

Among these are conducting needs assessments to understand better the prevalence and geographic distribution of health problems. The findings are used to raise awareness among concerned stakeholders; policy development; development and distribution of standard of care for the MCH population groups; quality assurance; implementation of a maternal deaths surveillance system; active participation in coalitions and committees concerned with the promotion of maternal health; professional development, and many other activities.

/2008/ One of the activities performed is the implementation of the Maternal Mortality Surveillance System aimed at gaining a better understanding of the prevalence, causes of death, and geographic distribution of health problems. The findings are used to raise awareness among concerned stakeholders; policy development; development of standards of care for the MCH population groups; quality assurance; active participation in coalitions and committees concerned with the promotion of maternal health; and professional development, among others. //2008//

2. Reduce unintended pregnancies. The HP 2010 agenda (Focus Area 9) has set the target that by 2010, 70% of all pregnancies should be intended. However, in PR there is a wide gap between current proportion of intended pregnancies and the set goal. Findings from the ESMIPR 2004 revealed that almost 7:10 (66.8%) of surveyed recent mothers did not plan their most recent pregnancy. In addition, 12.7% said they did not want their most recent baby. Therefore, it is estimated that over 34,000 babies are born in PR who are not planned. In addition, nearly 6,500 are not wanted by their mother at the time of birth.

/2008/ Findings from the ESMIPR 2006 revealed that almost 6:10 (65.5%) of surveyed recent mothers did not plan their most recent pregnancy. In addition, 6.9% said they did not want their most recent baby. Therefore, it is estimated that over 30,000 babies born in PR are unplanned. In addition, nearly 6,500 babies are not wanted by their mothers at the time of birth. //2008//

Unwanted pregnancies are associated with higher rates of abortion on demand, later or no prenatal care, unhealthy behaviors such as smoking, alcohol use, drug abuse and domestic violence. This situation leads to maternal complications and poor birth outcomes, including higher rates of LBW and prematurity, infant mortality, lower rates of breastfeeding and child neglect and abuse, among others.

It is important to mention that there is the knowledge and technology to prevent unwanted pregnancies. However, this requires personal commitment and responsibility at the time of

expressing sexuality. On the other hand, comprehensive family planning services must be available and accessible at the community level for those persons who voluntarily want to control the number and spacing of children.

Direct Services: In Puerto Rico there are four entities that render family planning services. The Department of Health through the GIP provides male and female sterilizations. Contraceptive methods are complemented by means of Title V funds. Other entities are the Title X (Grantee is the School of Medicine), 19 federally funded 229/330 programs and PROFAMILIA, a non-for profit organization. This entity recently received approval of a Title X Grant.

Enabling Services: The toll-free line and the Home Visiting Program, which provides inter conceptional services up to two years after the birth of the baby to all its participants and coordinates needed services at the community level.

Population Based Services: Community awareness through small group orientations, dissemination of educational materials. In addition, in collaboration with the Department of Education, the Title V program has implemented a peer group program and curriculum to promote abstinence education throughout the Island.

Infrastructure Building Services: The activities include needs assessment, dissemination of data, professional development and the promotion of public policy.

3. Improve newborn health. Focus Area 16 of HP 2010 establishes several objectives that help us to monitor the health of newborns. Among these are the percentage of LBW and VLBW babies, the perinatal, neonatal, post neonatal and infant mortality rates, etc. The target set for the IMR is no more than 4.5 infant deaths per 1,000 live births for all states, jurisdictions and ethnic groups. In 2003, the IMR in PR was 9.8/1,000 LBs. This rate is 2.1 times higher than the set target and 1.4 times above the U.S. mainland.

/2008/ In 2005, the IMR in PR was 9.3/1,000 LBS. This rate is 1.5 times higher than the set target for PR (6.2/1,000) and 2.1 times above the U.S. mainland. //2008//

The determinant causes for the observed IMR are prematurity and the percentage of LBW/VLBW. Congenital anomalies are the second cause of IM in PR. Among the most frequent congenital anomalies are heart defects and NTDs. It is important to mention that a significant proportion of infants with congenital anomalies survive the neonatal and post neonatal periods to die later at the preschool and school age periods. As a matter of fact, congenital malformations are the third leading cause of death in children between 1-4 years of age in the Island.

LBW and VLBW lead not only to higher IMRs, but also to CSHCN. This group of children require a large amount of resources, programs and services from different public and private entities to address their complex needs.

Direct Services: The GIP provides preventive, primary and some specialized services. The Department of Health complements specialized services with Title V and state funds (Pediatric Centers and the Pediatric Pulmonary Center), the Department of Education and various non-governmental organizations support the needs of this population.

/2009/ PPC ceased operations due to lack of funding.//2009//

Enabling Services: Toll-free line, APNI (Asociacion de Padres de Niños con Impedimentos), case management for children 0-3, Home Visiting services, and others.

Population Based Services: Among the group of services geared to improving the newborn health are the newborn screening program for congenital hereditary diseases, newborn hearing screening, immunizations, folic acid prevention campaign and Early Intervention Program (Law

51, 1996).

Infrastructure Building Services: Needs assessment, Registry of Congenital Anomalies, Autism Surveillance, public policy. Law 51 of 1996 sets forth the development of standards of care, quality assurance, coalitions and committees concerned with the attention of the needs of the population with special health care needs.

/2008/ Another element in the Infrastructure Building Services is the Infant Mortality Surveillance System (SiVEMI, Spanish acronym). This is a continuous surveillance system that monitors infant deaths in PR. The findings are used to raise awareness among concerned stakeholders; policy development; development of standards of care for the MCH population groups; quality assurance; active participation in coalitions and committees concerned with the promotion of infant health; and professional development among others.

Collaborative efforts with the March of Dimes PR Chapter allow us to monitor and disseminate information on two of the contributing factors for infant deaths, prematurity and low birth weight. Recently the MCH program was incorporated on a Steering Committee of Prematurity of the Puerto Rico Chapter of March of Dimes. The main objective of this committee is to analyze all available data concerning premature births to identify the risk factors of prematurity in PR. This analysis will be disseminated to stakeholders and health professionals in a Prematurity Summit scheduled for November 2007. //2008//

4. Reduce adolescent pregnancy. The roots of the problem of adolescent pregnancy are multi factorial and very complex. Therefore, there are no simple strategies to address this public health problem. The need to involve a wide array of stakeholders is crucial in addressing adolescent pregnancy. These include, but are not limited to the family, adolescent themselves, the schools, Department of Health, CBOs, the media, private sector, and non-traditional partners such as the faith community.

Currently, in PR nearly 25 women under 20 years of age become mothers every 24 hours, some as young as 10-14 years of age. Nearly eight out of 10 are unwed and over 90% hold the GIP. Definitely this is a social problem that impacts women in the early reproductive period, their children, families and the society at large.

Direct Services: GIP with prenatal and maternity services, newborn and pediatric services, early intervention services, family planning services, among others.

Enabling Services: WIC program and Home Visiting services.

Population Based Services: Comprehensive Adolescent Health Services with peer groups, and abstinence education program.

Infrastructure Building Services: Needs assessment, sharing of data, coalitions, public policy, professional development, coordination of services, etc.

5. Reduce behavioral risk factors among pregnant women and adolescents. A significant proportion of pregnant women are engaged in unhealthy behaviors such as smoking, alcohol consumption, illegal drug use and abuse and unprotected sex. These behaviors are contributing factors for the high rates of LBW, premature labor and congenital anomalies which are the determinant factors for our higher rates of IM in the Island. Therefore, we need to address these behaviors in order to improve the maternal and newborn health.

Similarly, our adolescent population involves in behaviors such as smoking, alcohol and illegal drug use and unprotected sexual activity. These behaviors are the root of delinquency, violence (homicides) and motor vehicle crashes with its consequences: deaths and injuries.

/2007/ No changes in PR priority areas are being proposed. //2007//

/2008/ No changes in PR priority areas are being proposed. //2008//

/2009/ The MCH Division has chosen to expand priority 3 to include the entire pediatric population. During the past three years, we have been involved in several investigations to evaluate in a comprehensive way the health and wellbeing of the pediatric population, particularly those in the age ranges of 1-14 years of age. We have discovered that only 55% of our second grade students have a healthy weight. In addition, a study conducted to evaluate the oral health status of third grade students revealed that despite wide dental insurance coverage, services such as dental sealants they are being underutilized and there are disparities in oral health associated with type of school. Only 17% of students evaluated had sealants despite the fact 94% of them had dental insurance. Although deaths related to unintentional injuries are not very numerous, they are unacceptable and must be prevented. PR has the highest asthma prevalence rate in the nation.

To improve child health we are providing the following:

Direct services: Pediatric Centers provide specialized services to CSHCN; the Early Intervention Program provides services to the eligible population 0-3 years old with developmental delays and their families, Medical Home Pilot Project.

Enabling Services: HVP, WIC.

Population Based Services: CHW Program, Immunization, Health Education, Oral Health Program, Metabolic Newborn Screening Program, Universal Newborn Hearing Screening Program.

Infrastructure: HP 2010 Initiative, Safe Kids Coalition, Obesity Prevention Alliance, Public Policy development, Asthma Coalition and State Plan, Law #351 (Birth Defect Surveillance System), SSDI, epidemiological research on public health issues, Needs Assessment for Persons with Autism Spectrum Disorder, Autism public policy, ECCS Project, PR CSHCN survey, CSHCN Section qualitative study to collect data on YSHCN perspectives and needs that will guide the effective implementation of activities in the Transition Action Plan of YSHCN to adult life. //2009//

An attachment is included in this section.

C. National Performance Measures

Performance Measure 01: *The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective	96.1	96.3	96.5	100	100
Annual Indicator	95.4	100.0	100.0	100.0	100.0
Numerator	48468	23	24	17	28
Denominator	50803	23	24	17	28
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and					

2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	100	100	100	100	100

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Data provided by the Puerto Rico Hereditary Disease and Newborn Screening Program.

Notes - 2005
Data provided by the Puerto Rico Hereditary Disease and Newborn Screening Program.

a. Last Year's Accomplishments
Law No. 84, 1987, mandates universal newborn screening for all live infants born in PR. Currently the Neonatal Screening Program for Hereditary Diseases (NSPHD) screens for PKU, hypothyroidism, sickle cell anemia, Galactosemia and Congenital Adrenal Hyperplasia. The NSPHD is a comprehensive program. It performs confirmatory tests in cases with an abnormal screening tests. In addition, it makes sure parents of children with a confirmed condition receive genetic counseling and their children the specialized medical treatment and nutritional follow up they need.

Form 6 summarizes the newborn screening activity and its results during fiscal year 2006-2007. During this period, the NSPHD program served 48,063 out of the 48,140 registered live births during that time. This figure represents 99.8% of all live births during the reporting year. This increase is due in part to the fact that currently all birthing hospitals are sending their newborn screen samples to the NSPHD.

During FY 2006-07, a total of 202,200 tests were conducted. Abnormal results were found in 5,347 cases. Twenty-eight (28) cases were diagnosed with a congenital disease. The program identified: PKU-2 cases; hypothyroidism-7 cases; sickle cell anemia-15 cases, one case of congenital adrenal hyperplasia and three cases of galactosemia. All (100%) of them received counseling and follow up treatment. Patients that required, either an evaluation by an endocrinologist, attendance to a metabolic clinic or WIC program services received the appropriate referral. The WIC program provided those under five (5) years of age the specialized formulas their specialist recommended and the Pediatric Centers did the same for those over 5 years of age.

A total of 1,132 newborns with abnormal hemoglobin traits were detected. Fifteen (15) had hemoglobinopathies of clinical significance. Among them, fourteen (14) with Hemoglobin Hb FS and one (1) with HB FS/C. A total of 427 cases with abnormal hemoglobin traits and 6 with sickle cell trait.

Six hundred and sixty seven families with neonates with abnormal traits were evaluated in the clinics. Both the children and their parents were tested to detect abnormal hemoglobins. Those with abnormal results received genetic counseling.

On June 21, 2006 the facilities for the Tandem Mass Spectrophotometer laboratory were formally inaugurated in the Pediatric Hospital. The total investment for this expansion was $425,000.00. This instrument was installed with the purpose of expanding the number of screenings performed to include conditions such as Carnitine Deficiency, Organic Acid Metabolism Disorder and Fatty Acid Oxidation Metabolism Disorder (MCADD, SCADD, LCADD), Nonketotic Hyperglycemia and some Amino Acid Metabolism Disorders (phenylalanine, methionine, tyrosine, valine).

Title V funds support eight perinatal nurses throughout the island who regularly visit birthing hospitals. They provide key follow up activities in those cases where NSPHD is unable to locate the families of infants who screen positive. The MCH staff visit their homes and if necessary summon the help of the Department of the Family or the Police, in an effort to locate them and have them retested.

Perinatal nurses also provide postpartum education, refer potential candidates to primary services and home visiting nurses, disseminate educational materials and collect information. During the reporting period, the perinatal nurses conducted 19,008 individual orientations, and 11,096 postpartum women were reached through 1,113 group orientations sessions.

During CY 2007, the Home Visiting Nurses served 6,390 pregnant women and children under 2 years of age. Orientations regarding the importance of newborn screening for congenital diseases is a topic regularly included during the interventions with HVP pregnant women. Also the CHW's reached 465 persons at the community level with orientations concerning the importance of newborn screening for hereditary diseases.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Conduct a pilot project of 10,000 samples using the Tandem Mass Spectrophotometer to test for additional hereditary conditions that are not included in the universal screen.			X	
2. Monitor compliance with Law No. 84 particularly among birthing institutions with the lowest newborn screening rates in order to comply with universal newborn screening.				X
3. Link infants with genetic and metabolic disorders with nutritional and specialized medical care. Refer children with congenital conditions that require nutritional education and management such as PKU and galactosemia to the WIC program.		X		
4. Provide prenatal counseling to all HVP participants regarding the importance of newborn screening.		X		
5. Provide genetic counseling to families of newborns with genetic or metabolic conditions.	X			
6. Continue efforts directed at linking newborn screening data files with birth certificates.				X
7. Hold regular meetings of the Council on Hereditary Disorders and increase membership.				X
8. Educate postpartum women on the importance of asking for newborn screening results during the first visit to their pediatrician.		X		
9. Disseminate educational materials regarding the importance of having newborns whose screening is positive receive a confirmatory test and treatment if diagnosis is confirmed.			X	
10. Provide perinatal education to providers and parents regarding the importance of the newborn screens.			X	

b. Current Activities

The NSPHD continues to work to ensure that all newborns in PR are tested, abnormal tests confirmed and all those with a confirmed condition receive adequate follow up and treatment.

NSPHD has been working to increase the number of tests performed but faces severe challenges. The MS/MS machine was purchased, installed, staff trained, machine calibrated and preliminary quality control testing conducted successfully. However, logistical problems with the equipment have prevented them from starting the pilot test that will include 10,000 samples. The manufacturer is working to resolve the problem which appears to be due to incompatibilities within the computer components.

A legislative piece is being considered to require all infants are screened for all the metabolic conditions for which testing is possible using the MS/MS equipment. Until this is passed the Advisory Committee comprised of experienced and respected geneticists will assume the primary role of approving those conditions that will be included as part of the routine testing. Their deliberations and final decision will be based on the results obtained from the pilot test. Cost effectiveness, treatment availability and prevalence of the condition in PR will be key in the selection process.

Efforts to link data from the metabolic screening program and UNHSP continue. Efforts to link them were hampered when the IT expert working on the project was unable to continue working on it temporarily.

c. Plan for the Coming Year

A pilot project that will increase the number of tests conducted using the tandem mass spectrometry methodology to detect genetic conditions should begin as soon as the equipment is working properly. This pilot project will include testing of 10,000 samples. Once this phase ends additional testing for up to ten new conditions will be added. The Advisory Committee will monitor results from the pilot project and data from the initial testing phase. Based on the evaluation of data collected, they will provide recommendations on which tests should be mandated as part of the universal screening program. The cost of the testing is expected to increase to $38.00 per sample.

Efforts to continue linking with the UNHSP are expected to continue now that the IT expert is again working with the CHSCN Division and will be able to continue collaborating with this project. It is our goal to link data from the NSPHD, birth records and the UNHSP since both screenings are performed at the time of birth and are required by law. The UNHSP has already implemented the electronic system in key birthing hospitals.

Linking with them and using their program will benefit us since it already includes fields where data related to follow up activities and tracking of suspected cases can be entered. These efforts will help us ensure participants in both programs are not lost to follow up and receive timely confirmatory tests and treatments and will allow us to detect infants who may have received one of the screenings but not the other. In addition, it will reduce data entry time, the need for additional equipment and technical support. It should also help with quality assurance, documentation of appropriate follow up of infants with positive screening tests, and timely treatment of confirmed cases.

In addition, activities included in Table 4a will continue.

Performance Measure 02: *The percent of children with special health care needs age 0 to 18 years whose families partner in decision making at all levels and are satisfied with the services they receive. (CSHCN survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007

Annual Performance Objective		0	45	49	51
Annual Indicator	NaN	44.8	44.8	44.8	44.8
Numerator	0	162	162	162	162
Denominator	0	362	362	362	362
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	54	57	57	58	59

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
For this performance measure the data reported in 2006 is pre-populated with data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

Notes - 2005
The data reported in 2005 are pre-populated with the data from 2004 for this performance measure.

a. Last Year's Accomplishments
The CSHCN Committee met during the past year to monitor the progress made towards achieving CSHCN Title V performance measures based on our plan of action. The Committee is composed of representatives from public agencies, such as Department of Health, ASES, Administration for Vocational Rehabilitation, Office of the Ombudsman for Persons with Disabilities, Citizens' Affairs Office; health insurance companies that offer services under the GIP; physicians and other health professionals; community-based organizations; academic-based centers (Institute on Developmental Disabilities, Puerto Rico Assistive Technology Program of the UPR); and families of children with special health care needs. This Committee worked to identify, design and implement activities directed at reaching families and increasing their participation in the Committee.

One of the activities identified to increase families' participation in the Committee was to prepare flyers to let them know about the Committee. The purpose of the flyers was to motivate families to participate in Committee's meetings and to share information about their needs in order to improve services and their quality of life. Flyers were posted in the bulletin boards of the Early Intervention Program, Metropolitan Pediatric Center (PC) and five community-based organizations. They included contact data in case they needed additional information. The information was also included in magazines published by the State Council for Independent Living and the Department of Education. As a result four mothers called to ask for additional information.

Workshops about the Bill of Rights of Persons with Disabilities (State Law No. 238 enacted on August 2004) were offered to 172 health professionals in six regional Pediatric Centers in coordination with MAVI, a community-based organization that offers independent life services to people with special needs. The workshops were offered from February to August 2007. Pre and

post tests administered during the workshop revealed a statistically significant (13.4%) increase in knowledge ($p<0.05$). These tests provided us the opportunity to identify areas that needed improvement or reinforcement in future workshops. Fact sheets with selected topics of Law 238 were distributed among families that receive services from the regional Pediatric Centers around the Island.

The Committee recognized the need to provide families information about the services included in the special coverage for CSHCN as part of the GIP. A brochure was prepared to increase family awareness about how to obtain the special coverage, procedures for filing complaints and contact information. The brochure was completed on September 2007. The Committee developed an additional brochure to educate families about the medical home concept and the importance of active family participation in the health care of their children with special needs in coordination with their primary physician.

The CSHCN Section identified the need to hire a family advocate and prepared a job description for the position; however, due to budget constraints the position could not be filled.

PR needs to implement a study to collect information about the CSHCN population in the Island. This study will provide valuable and necessary data to determine the CSHCN prevalence, to collect data for Title V NPMs 2-6 and to know the characteristics, health status and service needs of CSHCN and their families. The CSHCN section of the PRDOH completed the steps necessary to implement the study as recommended by Pam Eason during a site visit to PR. These steps included the review and adaptation of the SLAITS-CSHCN Spanish questionnaire, communication by e-mail with other states regarding the CSHCN survey, the development of a survey protocol, IRB submission and approval, and the selection of a company to be contracted to perform the study at a cost of $42,000. Although we had an estimate for the study, lack of funding for the project prevented us to conduct the survey.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Promote collaborative work among Committee Members.		X		
2. Establish links with parent support groups and increase their participation in the Committee.		X		
3. Distribute flyers to encourage family participation in the Committee.				X
4. Distribute the medical home brochure to CSHCN families.		X		
5. Distribute the Bill of Rights for People with Disabilities fact sheet to the families.		X		
6. Distribute a brochure about the services provided by the CSHCN Program to the families and primary care physicians.		X		
7. Develop a brochure about Title V NPMs to be distributed among families.		X		
8. Continue to hold periodic meetings with ASES and health insurance companies to address families' needs and reduce the barriers they face.				X
9. Maintain communication with the PR Immunization Program Director to follow up on the status of the survey.				X
10.				

b. Current Activities

The CSHCN Section continues its efforts to promote the collaborative participation of stakeholders and families in the Committee. One of the Committee's major strengths is the continuous participation of two independent living community-based organizations, IDD, Family

Voices and the Citizens' Affairs Office.

The Committee continues to identify strategies to increase family participation such as linking parent support groups to Title V. We are in the process of identifying these parent support groups throughout the Island. A parent support group from the southern region of PR who learned about us through the flyers has contacted us. We are beginning to establish links with them by sharing educational materials and information about the Title V Program.

The medical home brochure with information for CSHCN families is being distributed in health fairs and PCs. Flyers are being distributed to families in the Bayamón and Caguas Pediatric Centers. Fact sheets describing Law 238, 2004 are being distributed to families at PCs.

Conference calls and conversations between MCHB, CDC, the PRMCH Division and the PR Immunization Program are taking place to discuss strategies that will allow the PR CSHCN Program to obtain data for NPMs2-6 by including survey questions as part of the Immunization Survey.

c. Plan for the Coming Year

Activities for the coming year include developing networking links between parent support groups and Title V. The CSHCN Section will distribute educational materials that describe Title V and CSHCN Program services in meetings with parent support groups in order to increase awareness among CSHCN families. Also in these meetings, the CSHCN Section will collect information about the needs of families. The CSHCN Section will also develop an additional brochure for families with information about the MCH Block Grant and the CSHCN National Performance Measures.

Brochures containing information on GIP special insurance coverage for CSHCN and Medical Home, as well as the Bill of Rights for People with Disabilities fact sheet and flyers to motivate families to participate in the Committee, will be distributed in places and activities where the CSHCN Section has the opportunity to reach out to CSHCN families. These educational materials will be also distributed throughout agencies and organizations represented in the Committee. The Committee will work in identifying new strategies to distribute the educational materials and to disseminate the information.

Regarding the CSHCN survey, the CSHCN Section will write a letter to the MCHB to formally address this issue in order to identify solutions or alternatives to obtain the data for NPMs 2-6. This study will provide the evidence necessary to guide the planning, development, implementation and evaluation of strategies, activities and policies necessary to improve the health services system for this population in the Island. PR is facing many challenges in implementing this study, especially in gathering the financial support necessary to implement the study at the population level.

Performance Measure 03: *The percent of children with special health care needs age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home. (CSHCN Survey)*

Tracking Performance Measures

[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective		0	41	43	45
Annual Indicator	NaN	38.7	38.7	38.7	38.7
Numerator	0	127	127	127	127
Denominator	0	328	328	328	328
Check this box if you cannot report the numerator					

because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	46	48	49	49	49

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

Notes - 2005
The data reported in 2005 are pre-populated with the data from 2004 for this performance measure.

a. Last Year's Accomplishments
The CSHCN Committee met during the past year to discuss progress toward achieving the medical home performance measure based on the action plan. The Committee is composed of representatives from public agencies, such as Department of Health, ASES, Administration for Vocational Rehabilitation, Office of the Ombudsman for Persons with Disabilities, Citizens' Affairs Office; health insurance companies that offer services under the GIP; physicians and other health professionals; community-based organizations; academic-based centers (Institute on Developmental Disabilities and the Puerto Rico Assistive Technology Program of the UPR); and families of children with special health care needs.

The Committee worked on establishing the groundwork needed to begin a medical home pilot project in Bayamón Region's pediatric practices willing to participate. The Committee performed literature review on issues related to the medical home model and identified the strategies that would be implemented in the pilot project. They also identified the need to consider the key health care system components required for effectively implementing the medical home pilot project. These include ASES and the health care insurance companies that provide GIP services, the American Academy of Pediatricians (AAP)-PR Chapter, volunteer pediatricians and community-based organizations. Once the pilot project plan was developed, it was presented to members of the AAP who revised the project and recommended including proper reimbursement for pediatricians as an incentive for their participation in the project. As part of the project, the CSHCN Section developed educational materials for pediatricians on diverse topics such as: medical home components, care coordination, developmental screening tools, and youth transition to adult life.

The CSHCN Section developed an evaluation plan to monitor the effective implementation of the medical home pilot project. The Medical Home Index and other medical home evaluation tools were revised in order to develop the forms that would be used to evaluate the pediatricians' practices.

An interview questionnaire was developed with the following objectives: a) measure the level of knowledge pediatricians have regarding medical home elements, developmental screening, family-centered services and youth transition to adulthood; b) collect data about pediatricians'

practices characteristics and potential barriers to the medical home pilot project implementation; and c) identify training needs of pediatricians that will participate in the project.

The CSHCN Section participated in SECCS Committee meetings with the purpose of identifying additional areas for potential collaboration during the implementation phase of medical homes for children in Puerto Rico.

PR needs to implement a study to collect information about the CSHCN population in the Island. This study will provide valuable and necessary data to determine the CSHCN prevalence, to collect data for Title V NPMs 2-6 and to know the characteristics, health status and service needs of CSHCN and their families. The CSHCN section of the PRDOH completed the steps necessary to implement the study as recommended by Pam Eason during a site visit to PR. These steps included the review and adaptation of the SLAITS-CSHCN Spanish questionnaire, communication by e-mail with other states regarding the CSHCN survey, the development of a survey protocol, IRB submission and approval, and the selection of a company to be contracted to perform the study at a cost of $42,000. Although we had an estimate for the study, lack of funding for the project prevented us to conduct the survey.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue with the development of the medical home pilot project.				X
2. Meet with ASES and health insurance companies to identify strategies to promote the medical home implementation.		X		
3. Distribute the medical home brochure to CSHCN families.		X		
4. Participate in the SECCS meetings to identify areas of collaboration for the medical home project.		X		
5. Develop evaluation tools to monitor the medical home pilot project implementation.				X
6. Maintain communication with the PR Immunization Program Director to follow up on the status of the survey.				X
7.				
8.				
9.				
10.				

b. Current Activities

The CSHCN Section met with ASES to discuss the medical home pilot project, areas of collaboration and the results of the analysis ASES made regarding the utilization of CPT codes for CSHCN services. During the meeting the need to review the PR EPSDT guidelines was identified. Afterwards, MCHB offered the TA "PR Leadership Workshop on Collaboration to Improve EPSDT and Young Children Health". Those who participated in the TA recommended that the PR EPSDT review process should focus on early developmental screening and immunization. ASES and SECCS are participating in the ABCD Screening Academy TA to promote early developmental screening. The CSHCN Section continues to participate in the SECCS meetings.

The CSHCN Section continues to meet with ASES and the Sub-Secretary of Health to identify strategies to offer incentives to pediatricians interested in participating in the medical home pilot project. The questionnaire to measure pediatricians' medical home knowledge is being validated with pediatricians at the Metro PC.

The medical home brochure was completed and approved by the DOH. A total of 660 brochures

were distributed at health fairs, the OPPI annual conference and two PCs. The brochure is being distributed among other PCs.

Conference calls and conversations between MCHB, CDC, the PR MCH Division and the PR Immunization Program are taking place to discuss strategies that will allow us to obtain data for NPMs 2-6.

c. Plan for the Coming Year

The Committee will continue to monitor the progress of the medical home pilot project plan. Meetings with stakeholders will continue to identify strategies to effectively implement the medical home pilot project in the Bayamón Region. A possible strategy suggested by ASES is to offer incentives to pediatricians to participate in the project. To this end, the CSHCN Section is planning to present the project to Humana, which provides services under the GIP in the region of Bayamón. Medical home educational materials that will be distributed among participants of the pilot project will be reviewed by pediatricians participating in the Committee. We will continue to review the available medical home evaluation tools in order to select the most appropriate tool and adapt it for the medical home pilot project.

The medical home brochure will be distributed to families served by the Pediatric Centers and at the community level. The CSHCN Section will continue to participate in SECCS meetings which will allow us to strengthen collaborative efforts for the medical home project for children in PR.

Regarding the CSHCN survey, the CSHCN Section will write a letter to the MCHB to formally address this issue in order to identify solutions or alternatives to obtain the data for NPMs 2-6. This study will provide the evidence necessary to guide the planning, development, implementation and evaluation of strategies, activities and policies necessary to improve the health services system for this population in the Island. PR is facing many challenges in implementing this study, especially in gathering the financial support necessary to implement the study at the population level.

Performance Measure 04: *The percent of children with special health care needs age 0 to 18 whose families have adequate private and/or public insurance to pay for the services they need. (CSHCN Survey)*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective		0	18	19	20
Annual Indicator	NaN	17.0	17.0	17.0	17.0
Numerator	0	53	53	53	53
Denominator	0	311	311	311	311
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	21	22	23	23	23

Notes - 2007

Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

Notes - 2005
The data reported in 2005 are pre-populated with the data from 2004 for this performance measure.

a. Last Year's Accomplishments
The CSHCN Title V Committee continued to meet to identify activities geared to address families' needs for appropriate health and related services. The CSHCN Section met with ASES and the health insurance companies that provide services under GIP in April 2007. That day the insurance companies shared with us information regarding their case management programs and the special coverage health benefits they provide for children with special health care needs. Information on the benefits and eligibility requirements for the special coverage was not uniform among the health insurance companies. In response to these findings the Committee developed a family-friendly brochure to inform families about the special coverage and procedures for filing complaints. This information was not previously accessible to families. The brochure was reviewed and approved by ASES and the Department of Health.

PR needs to implement a study to collect information about the CSHCN population in the Island. This study will provide valuable and necessary data to determine the CSHCN prevalence, to collect data for Title V NPMs 2-6 and to know the characteristics, health status and service needs of CSHCN and their families. The CSHCN section of the PRDOH completed the steps necessary to implement the study as recommended by Pam Eason during a site visit to PR. These steps included the review and adaptation of the SLAITS-CSHCN Spanish questionnaire, communication by e-mail with other states regarding the CSHCN survey, the development of a survey protocol, IRB submission and approval, and the selection of a company to be contracted to perform the study at a cost of $42,000. Although we had an estimate for the study, lack of funding for the project prevented us to conduct the survey.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Distribute the GIP special coverage brochure to CSHCN families.		X		
2. Continue to meet with ASES and health insurance companies in order to identify strategies and potential collaborative efforts to address families' needs and complaints.				X
3. Provide ASES information about the services the Pediatric Centers offer so they can distribute it to GIP providers.		X		
4. Maintain communication with the PR Immunization Program Director to follow up on the status of the survey.				X
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities
The special coverage brochure was distributed to 38 families in a community health fair held in Yabucoa on September 2007 and to 192 participants (families and professionals) during the OPPI conference held in Guayama on November 2007. The CSHCN Section is distributing brochures to families that visit Pediatric Centers and Medical Assistance Offices (Medicaid) island wide.

ASES has requested the CSHCN Section to provide them information regarding the definition of CSHCN and the services being provided by the Early Intervention and CSHCN Program at the Pediatric Centers. This information will be distributed among physicians that provide services to children with the GIP.

A laboratory has been established in PR that offers genetic and metabolic diagnostic tests. It is expected to increase family access to these services. Currently, these tests are excluded from the GIP coverage since they were not available locally and needed to be performed in US.

Conference calls and conversations between MCHB, CDC, the PRMCH Division and the PR Immunization Program are taking place to discuss strategies that will allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey.

c. Plan for the Coming Year
The plan for the coming year includes the identification of strategies to increase families' access to the GIP special coverage brochure to CSHCN families. The CSHCN Section will continue to meet with ASES and the health insurance companies to identify potential collaborative efforts to address families' needs.

The CSHCN Section will continue efforts to implement medical homes through the pilot project in the municipality of Bayamón. The Bayamón Pediatric Center Medical Director will identify pediatricians that might be interested in participating in the project. The Section will request ASES a meeting with the Humana Health Care Insurance Medical Director to discuss the project and potential collaborations from the plan. Humana is the health insurance company contracted by ASES to provide GIP services in the Bayamón Region.

The Pediatric Centers will distribute brochures that describe the services provided by the Early Intervention and CSHCN Programs to IPAs.

The EPSDT guidelines will be reviewed in light of the newly revised Bright Futures Guidelines. Special attention will be placed to areas identified as priorities during the "Puerto Rico Leadership Workshop on Collaboration to Improve EPSDT and Young Children Health" offered by MCHB in March 2008. Among the identified priority areas were: early developmental screening and immunization.

We will continue educating families to empower them to appropriately express their needs in order to overcome barriers and mobilize the system.

Regarding the CSHCN survey, the CSHCN Section will write a letter to the MCHB to formally address this issue in order to identify solutions or alternatives to obtain the data for NPMs 2-6. This study will provide the evidence necessary to guide the planning, development, implementation and evaluation of strategies, activities and policies necessary to improve the health services system for this population in the Island. PR is facing many challenges in implementing this study, especially in gathering the financial support necessary to implement the study at the population level.

Performance Measure 05: *Percent of children with special health care needs age 0 to 18 whose families report the community-based service systems are organized so they can use them easily. (CSHCN Survey)*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective		0	70	71	73
Annual Indicator	NaN	68.0	68.0	68.0	68.0
Numerator	0	246	246	246	246
Denominator	0	362	362	362	362
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	75	76	77	77	77

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

Notes - 2005
The data reported in 2005 are pre-populated with the data from 2004 for this performance measure.

a. Last Year's Accomplishments
The Service Directory developed by the CSHCN Section and revised by the Committee contains information about 81 CBO's, public and private agencies, and organizations that provide services to CSHCN and their families throughout the island. It was included in the PRDOH web page and initially distributed to 38 families that participated in a community health fair held in Yabucoa in September 2007. Copies were also distributed to 192 participants (families and professionals) in the OPPI Annual Conference. The Directory was very well received by families.

As a result of the technical assistance workshop offered by the IDD of the Medical Sciences Campus of the UPR and the Medical College of the Westchester Institute of New York (see NPM #6), members of the Committee decided to develop an interagency workshop directed at medical students about transition to adulthood and services available in the community. The workshop agenda was developed by the following members of the Committee: MAVI, CEPVI, SER and the Citizens' Affairs Office. The workshop was named "Rights and Needs of CSHCN and their families" and included information about independent life services, vocational rehabilitation services, laws related to special education rights, sensitivity toward people with disabilities, available health services and other pertinent information.

PR needs to implement a study to collect information about the CSHCN population in the Island. This study will provide valuable and necessary data to determine the CSHCN prevalence, to collect data for Title V NPMs 2-6 and to know the characteristics, health status and service needs of CSHCN and their families. The CSHCN section of the PRDOH completed the steps necessary to implement the study as recommended by Pam Eason during a site visit to PR. These steps included the review and adaptation of the SLAITS-CSHCN Spanish questionnaire, communication by e-mail with other states regarding the CSHCN survey, the development of a survey protocol, IRB submission and approval, and the selection of a company to be contracted to perform the study at a cost of $42,000. Although we had an estimate for the study, lack of funding for the project prevented us to conduct the survey.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Revise and then distribute the Directory of Services to Pediatric Centers, agencies and organizations.		X		
2. Review and modify the workshop for medical students according to the evaluations.		X		
3. Maintain communication with the PR Immunization Program Director to follow up on the status of the survey.				X
4.				
5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

Directories were distributed to 165 special education teachers on February 2008 and are being distributed to Pediatric Centers, community activities and health fairs.

The first workshop "Rights and Needs of CSHCN and their Families" was offered in March 6, 2008 to 46 medical students from the Central Caribbean University School of Medicine. Pre and post tests were administered to students in order to measure knowledge change as a result of the workshop. The results showed a statistically significant (16%) improvement in knowledge ($p<0.05$). Workshop evaluation forms were also distributed and analyzed. The evaluation forms contained an area for students' commentaries and feedback. The results are being discussed with workshop's presenters in order to identify areas for improvement.

Conference calls and conversations between MCHB, CDC, the PRMCH Division and the PR Immunization Program are taking place to discuss strategies that will allow us to obtain data for NPMs 2-6.

c. Plan for the Coming Year

The Service Directory will be revised, updated and distributed to agencies, organizations and pediatricians that will be participating in the medical home pilot project.

The workshop "Rights and Needs of CSHCN and their Families" will be modified according to participants' feedback. The plan is to continue offering this workshop at other schools of medicine in PR.

The Committee will continue to identify other strategies to improve our performance regarding this

measure.

Regarding the CSHCN survey, the CSHCN Section will write a letter to the MCHB to formally address this issue in order to identify solutions or alternatives to obtain the data for NPMs 2-6. This study will provide the evidence necessary to guide the planning, development, implementation and evaluation of strategies, activities and policies necessary to improve the health services system for this population in the Island. PR is facing many challenges in implementing this study, especially in gathering the financial support necessary to implement the study at the population level.

Performance Measure 06: *The percentage of youth with special health care needs who received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective		0	10	12	14
Annual Indicator	NaN	9.1	9.1	9.1	9.1
Numerator	0	9	9	9	9
Denominator	0	99	99	99	99
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	16	18	20	20	20

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
For this performance measure the data reported in 2006 is pre-populated with the data from 2005. This data was obtained from a family survey implemented at the Pediatric Centers in February 2005. This is the first intent made to obtain baseline data for this performance measure. The results are specific for the Pediatric Centers' population and cannot be generalized to the population of CSHCN in Puerto Rico.

Notes - 2005
The data reported in 2005 are pre-populated with the data from 2004 for this performance measure.

a. Last Year's Accomplishments
A technical assistance workshop about transition to adult life was offered to youth with special needs, families and stakeholders on June 28, 2007. This workshop was offered by the Institute on Developmental Disabilities of the University of PR in collaboration with the Medical College of the Westchester Institute of New York. A total of 57 persons participated in the workshop including representatives from the CSHCN Program, IDD, Department of Education, Vocational Rehabilitation Administration and pediatricians. A family-student transition specialist from the Westchester Institute presented information about self-determination and transition to adult life. Youth with special needs and their families had the opportunity to participate and present their

needs, barriers and personal stories. Agencies had the opportunity to share information and to identify areas for collaboration. During the last section of the workshop the audience was divided into seven groups so they could review and discuss the PRDOH Transition Action Plan and to develop and recommend new ideas and strategies. This plan for youth with special needs had been previously developed and reviewed by the CSHCN Title V Committee.

As a result of the technical assistance workshop, members of the Committee decided to develop an interagency workshop for medical students about transition into adulthood and inform them of available services in the community. The workshop was developed by the CSHCN Section, MAVI, CEPVI, SER and the Citizens' Affairs Office and was named "Rights and Needs of CSHCN and their Families". It included information about independent life services, vocational rehabilitation services, laws related to special education rights, sensitivity and health services, among other information. The workshop was offered on March 6, 2008 to 46 medical students from the Central Caribbean University School of Medicine. The students were given a pre and post test to measure changes in knowledge as a result of the workshop. Evaluation forms were also distributed.

The Department of Health in collaboration with MAVI offered information and workshops at the Pediatrics Centers for 172 health professionals about independent life services and the Bill of Rights of Persons with Disabilities during the months from February through August 2007. MAVI is a non-for-profit organization that offers independent life services to people with special health care needs.

A brochure with information about transition of youth with special health care needs to adulthood in the area of health services and care was completed and approved by the PRDOH.

PR needs to implement a study to collect information about the CSHCN population in the Island. This study will provide valuable and necessary data to determine the CSHCN prevalence, to collect data for Title V NPMs 2-6 and to know the characteristics, health status and service needs of CSHCN and their families. The CSHCN section of the PRDOH completed the steps necessary to implement the study as recommended by Pam Eason during a site visit to PR. These steps included the review and adaptation of the SLAITS-CSHCN Spanish questionnaire, communication by e-mail with other states regarding the CSHCN survey, the development of a survey protocol, IRB submission and approval, and the selection of a company to be contracted to perform the study at a cost of $42,000. Although we had an estimate for the study, lack of funding for the project prevented us to conduct the survey.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Distribute the brochure about transition of YSHCN to adult life to families in the PCs and to special education teachers from the Department of Education.		X		
2. Design a qualitative study to gather information of YSHCN perspectives on health care transition.				X
3. Review and improve the workshop “Rights and Needs of CSHCN and their families” that will be offered to medical students.				X
4. Maintain communication with the PR Immunization Program Director to follow up on the status of the survey.				X
5.				
6.				
7.				
8.				

9.				
10.				

b. Current Activities
The CSHCN Section is developing a qualitative study to collect data about YSHCN perspectives' on barriers and positive experiences that facilitate their transition from pediatric care to an adult medical provider. The Section is currently reviewing literature and discussing the information gathered before designing the methodology. The information from the qualitative study will guide the development of additional studies and the effective implementation of the activities in the Transition Action Plan.

The CSHCN Section analyzed the results of the pre and post tests administered to the medical students during the workshop "Rights and Needs of CSHCN and their Families". The results showed a statistically significant 16% improvement in knowledge ($p<0.05$). The workshop evaluation forms were also analyzed and the results are going to be discussed with workshop's presenters to identify areas for improvement.

The brochure for YSHCNS with information about health care transition is being distributed through Pediatric Centers, agencies and organizations.

Conference calls and conversations between MCHB, CDC, the PRMCH Division and the PR Immunization Program are taking place to discuss strategies that will allow the PR CSHCN Program to obtain data for NPMs 2-6 by including survey questions as part of the Immunization Survey.

c. Plan for the Coming Year
Transition Action Plan activities will be implemented progressively by stages. Some of the activities include educating pediatricians that will participate in the Annual Puerto Rican Pediatric Convention on how to assist YSHCN in their transition to adult life. The same message will be shared with pediatricians participating in the medical home pilot project.

The qualitative study about YSHCN transition to adult life will continue to be developed and is expected to be implemented during the next year.

The workshop "Rights and Needs of CSHCN and their Families" will be improved and expanded according to the students' feedbacks. The plan is to offer this workshop at other medical schools and eventually to pediatricians and other primary physicians in PR.

The brochure for YSHCN about health care transition will continue to be distributed at places where this population receives services.

Regarding the CSHCN survey, the CSHCN Section will write a letter to the MCHB to formally address this issue in order to identify solutions or alternatives to obtain the data for NPMs 2-6. This study will provide the evidence necessary to guide the planning, development, implementation and evaluation of strategies, activities and policies necessary to improve the health services system for this population in the Island. PR is facing many challenges in implementing this study, especially in gathering the financial support necessary to implement the study at the population level.

Performance Measure 07: *Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	92	92	93	94.5	95
Annual Indicator	56.9	92.7	94.5	94.5	91.2
Numerator	566	921	926	926	903
Denominator	994	994	980	980	990
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	95.5	96	96.5	96.5	96.5

Notes - 2007
Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health corresponding to the year 2007. This study surveyed children 35 months of age.

Notes - 2006
Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health, corresponding to year 2005.

Notes - 2005
Data from the Immunization Coverage Study provided by the PR Immunization Program of the Department of Health.

a. Last Year's Accomplishments
Law 25 of 1983 mandates children living in PR must be immunized according to the latest immunization schedule approved by the Secretary of Health. The IP of the PR DoH has been conducting annual immunization coverage studies to monitor compliance with established national and local guidelines. For the purpose of the study a full immunization schedule for children 35 months of age consists of 4 DTaP, 3 IPV, 3 HiB, 1 MMR and 3 Hepatitis B vaccines.

In 2006 CDC determined all Island territories would determine immunization coverage by administering standardized CDC questionnaire to a sample of the population selected using cluster sample methodology. The UPR School of Public Health was awarded a contract to select the sample and conduct house to house surveys in order to gather the data required to determine immunization coverage. Their staff was able to complete house to house surveys during the summer of 2006. This data has been entered using the software provided by CDC and is currently being validated prior to being analyzed by CDC.

In view of the delay in receiving the results of the CDC study, the PR Immunization program decided to repeat the same vaccination coverage study they performed in the past. This most recent study was conducted during the month of May 2007. It revealed 91.2% of 35 month olds had received a full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B. Coverage for single antigens was even higher. Nearly all (93%) had 4 DTaP, 98% had 3 doses of the Polio and 97% of children had 1 MMR dose. A complete series of Hepatitis B vaccines was documented at 98% and at 95% for HIB among children included in the study. In addition, 93% had at least one Varicella vaccine.

The immunization schedule was reviewed on January 2007 in order to comply with current CDC, ACIP and AAP Guidelines. This schedule established 11 year olds should receive Tdap boosters as well as the MCV and HPV vaccines. This age group was selected for logistical purposes. Selecting this specific age group will allow the IP and schools to monitor compliance with current recommendations with greater ease. The revised schedule maintains the recommendations for Influenza, Hepatitis A, Rotavirus and Varicella Booster Vaccines. This new schedule was rolled out to the press during the Childhood Vaccination Week held April 21-28. During this week a Press Conference with the attendance of the Secretary of Health, a media tour, multiple regional activities and 69 special immunization clinics were held; 1,492 persons were vaccinated.

This level of coverage is a reflection of the multiple collaborative efforts the PRDoH has been able to establish with public and private entities such as WIC, Private Insurance Companies, providers, schools, pharmacies, grocery stores, and pharmaceutical companies, among others. A key collaborator has been the Maternal and Child Health Division. Our Home Visiting Nurses and Community Health Workers are constantly reminding participants and the community at large of the importance of adequately immunizing their children during home visits, school activities and health fairs.

During CY 2006-2007, children from the 6,390 families in the HVP were evaluated for the adequacy of their immunization status, counseled and referred for vaccination, if needed. The MCH Division reports that 97% of Home Visiting Program participants had an up to date immunization record at the time they were discharged from the program. In addition, 1,587 individuals participated in 171 group meetings where they received information on the importance of children's immunizations. As a result of these efforts, three of our health regions had 97% of their 35 month olds in compliance with a full immunization schedule.

The MCH Division and the IP collaborated with the Office of Emergency Preparedness efforts to prepare for a potential Influenza Pandemic by participating in two drills. One full scale exercise was devoted to establishing a Point of Distribution (POD) to distribute immunizations and medications to large groups of people in case of an emergency. The second one was a table top exercise dealing with school closures in case of Influenza Pandemic.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Assess and promote adequate immunization for children participating in the Home Visiting Program.		X		
2. Collaborate with the Immunization Program initiatives to promote disease prevention.			X	
3. Identify and address system barriers which affect access to immunizations.				X
4. Monitor immunization rates by municipalities and health regions.				X
5. Update the immunization knowledge of the MCH staff (Home Visiting Nurses and Community Health Workers).				X
6. Use diverse community level interventions to disseminate the current immunization schedule.			X	
7.				
8.				
9.				
10.				

b. Current Activities

The 2008 immunization schedule had no changes. It recommends the Rotavirus, Hep. A or Flu but does not require them for child care or HS participants.

This year parents and the IP are facing great challenges due to reductions in VFC funds and changes in the way vaccines are distributed. These changes require providers establish more stringent criteria before determining eligibility and vaccinating children. As a direct result there has been a reduction in the number of providers and special clinics available to vaccinate children after hours and during mass vaccination events. Many parents have relied on these mass vaccination events as the main source for children immunization.

Privately insured children faced even more challenges since many PCP have decided not to vaccinate them due to: the increase in number of vaccines they must purchase and store, need to have alternative power source for storage, licensing requirements, elevated cost of vaccines, inadequate reimbursement and delays in receiving payment for their administration. In some instances the reimbursement fee does not cover the vaccine cost. Most parents in PR can't afford paying for the ever increasing number of costly vaccines out of pocket.

A group is currently analyzing the problem and preparing a plan to resolve the issue. MCH is supporting the alternative that promotes immunizing by pediatricians within a medical home model.

c. Plan for the Coming Year

We expect to receive the results of the 2006 CDC immunization coverage study soon and to be able to compare its findings with the local IP study. We expect the CDC study will allow us to determine if a telephone survey will provide us the same information as the house to house study. No new studies are being contemplated until the final report is received, analyzed and the best methodology identified.

The IP will continue to provide PCP's who care for GIP insured children and the uninsured the vaccines needed to immunize them. Vaccines will be distributed directly to their offices. Once there, providers will be directly responsible for administering them only to those that qualify and for storing them adequately. The IP will continue to use VFC funds to provide GIP participants, the uninsured and children with inadequate vaccine coverage the Rotavirus, Hepatitis A and HPV vaccines.

The recently established Immunization Taskforce comprised by PR HCI companies, ASES, AAP, Pediatric Society, Governor's Advisor, Patient Advocate Office, MCH, IP, hospitals and vaccine distributors will continue to meet to identify a way to insure barriers to immunization are eliminated. Until a solution is found, 2 mass vaccination events are planned for April and during the back to school period. In addition, temporary hospital based immunization clinics will be established.

Financial constraints continue to be a challenge. They make difficult for us to ensure all children receive all the recommended vaccines. The PR government is assigning $275,000 in order to increase the number of sites where the privately insured can be immunized.

The changes in the immunization requirements and the locations where they will be available will require that MCH staff and pediatricians are kept abreast of the changes so they can assist parents in locating and receiving these services.

Every April, Child Immunization Week celebration takes place during which IP staff conduct a media tour to explain changes in immunization schedule, requirements, location and insurance coverage. This information is also provided during health fairs, school and child care activities, CME activities and by distributing flyers in community based activities.

HVNs and CHWs will continue to educate and promote compliance with the vaccine schedule during home visits, school activities and health fairs. HVNs will evaluate the immunization status of the HVP participants and determine compliance with the immunization schedule. If HVP children are not complying with the current schedule, they will be referred to a provider for immunization.

The information gathered during the home visits, outreach activities and during activities conducted by the regional IP will help us monitor immunization rates at the municipal and regional level. Barriers and emerging difficulties as well as the impact of the strategy selected to resolve the problem will be shared with the IP.

Performance Measure 08: *The rate of birth (per 1,000) for teenagers aged 15 through 17 years.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	40.7	39.2	37.7	36.2	34.7
Annual Indicator	40.7	41.1	40.5	39.1	29.5
Numerator	3624	3656	3561	3433	2590
Denominator	89035	89014	88032	87842	87788
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	33.2	31.7	30.2	30.2	30.2

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Numerator: Preliminary data obtain from the Office of Informatics and Technology Advances (OITA) of the Department of Health. Denominator: Population estimates of the US Census.

Notes - 2005
Numerator: Preliminary data obtain from the Office of Informatics and Technology Advances (OITA) of the Department of Health. It includes data for the period of January to September 2005. Denominator: Population estimates of the US Census.

a. Last Year's Accomplishments
The 2006 VS data shows a decrease in the 15 to 17 years of age birth rate in PR. The rate decreased from 40.5 per 1,000 in 2005 to 39.1 in 2006. The MCH Division has chosen the Positive Youth Development (PYD) model as its main strategy to promote youth health and prevent high risk behaviors such as premature and unprotected sex. During this past year, the Sub Committee of the "Reto y Esperanza: Healthy Puerto Rican Youth Development" Project, the HRSA awarded CE Grant to Rochester University in collaboration with Cornell University, ACT for Youth, Konopka Institute and the PR-MCH Division, worked to develop a culturally

appropriate PYD Action Guide and Train the Trainer Manual. Drafts of the six modules were reviewed. The final versions for two of the modules were completed (PYD and Health and Building Youth-Adult Partnerships).

The MCH Adolescent Health Program (SISA) continued the Juvenile Health Promoters Project (JHPP) in 37 public, middle schools in PR. A total of 706 JHP' s ages 12-15 were able to reach 20,800 of their fellow students, parents and general public with their health promotion messages by organizing and holding 1,253 activities during the school year. The main focus of some of these activities was to disseminate teen pregnancy prevention messages. The JHPs Demonstration Project continued in two Juvenile Detention Centers. Fourteen male JHP and 14 females participated in project workshops and activities. In addition, the Naranjito Adolescent Program worked in collaboration with MCH to prevent teen pregnancies.

A qualitative evaluation to determine the impact of the JHP project on participating students was completed and data obtained analyzed. During the evaluation, participating youth were able to identify ways in which in the project had benefited them. Some of the ones they identified were: increased knowledge of the consequences associated with high risk behaviors (such as premature sexual activity), improvement in their leadership skills, increased self esteem, maturity, responsibility and self confidence to share health promotion messages with others.

We traditionally celebrate March as Teen Pregnancy Prevention Month in PR. Last year a group of six JHP met with the Secretary of Health. During the meeting, youngsters shared their ideas, insights and suggestions about teen pregnancy prevention in PR and the work they do as JHP. In March, 2007, a group of 561 students and Regional SISA Coordinators participated in 28 "Conversatorios" (open forum discussions). This strategy was selected to promote healthy communication between teens and adults and to help adults understand adolescents' views about teen pregnancy. The information gathered during these discussions was used to identify new strategies and initiatives to reduce teen pregnancies. The SISA Program Director offered four lectures to approximately 580 health professionals about the impact and consequences of teen births in PR.

The MCH staff offered 2,754 interventions on teen pregnancy prevention, sexuality education, self esteem, sexual development and other related themes to 43,553 participants.

The "Plain Talk/Hablando Claro" Demonstration Project completed the second year of its implementation phase. This collaborative effort with the Annie Casey Foundation, Naranjito Teen Program (NTP) and PR Title V reached a total of 136 community participants during meetings held in neighborhood homes.

According to the DoH organizational structure, the Puerto Rico Abstinence Education Program is also housed under the MCH Division and the Auxiliary Secretariat of Family Health and Integrated Systems. This program sponsors activities directed at reducing pregnancies in adolescents by promoting sexual abstinence exclusively. They work similarly to the MCH SISA program to develop teens' self-esteem, decision making strategies, leadership and character formation. A total of 237 schools in 60 towns participated in PRAEP activities. A total of 109 public and private school teachers and other adult mentors were trained on sexual abstinence education. In April 2007, a mass media campaign targeting teens, "La Otra Cara del Sexo", was launched. The Leaders for Wise Decisions initiative reached 58 students and 11 community leaders in 4 summits and follow up workshops. Three interactive workshops for parents and teens reached 535 persons.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**

1. Disseminate Positive Youth Development (PYD) by using the Action Guide and Train the Trainer curriculum developed by "Reto y Esperanza" Project.			X	
2. Support the Naranjito PYD community pilot program in order to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue SISA's Juvenile Health Promoters Project (JHPP) in public middle schools and the JHP pilot project in 2 Juvenile Detention Centers.			X	
5. Facilitate the development of culturally appropriate educational materials and PYD activities organized by teens to promote healthy behaviors and prevent teen pregnancies.			X	
6. Increase awareness of the consequences associated with teen pregnancies among health professionals and the general public including parents and communities.			X	
7. Support the Plain Talk pilot project developed to enhance parent-child and adult-youth effective communication about sexuality, prevent teen pregnancies and STDs. Review results of its evaluation and consider disseminating it.			X	
8. Collaborate with PRAEP activities directed at promoting sexual abstinence and parents' communication with their children regarding sexual abstinence to prevent teen pregnancies.			X	
9.				
10.				

b. Current Activities

The implementation of the PYD model as a teen pregnancy prevention strategy continues. A pilot project to test the culturally adapted model is being implemented in Naranjito communities. JHPP continues with 678 youths in 35 public middle schools and 18 youths in 2 Juvenile Detention Centers. A meeting of JHPP youth delegates and adult facilitators was held for the first time in May 2008 to gather ideas for future PYD activities. Island wide activities were held in March, to celebrate Teen Pregnancy Prevention Month.

A meeting with the Secretary of Education was held to discuss starting PYD Health Promotion Schools in Aug 2008. The Plain Talk project in Naranjito continued neighborhood meetings and held other teen pregnancy prevention activities during Plain Talk Teen Pregnancy Prevention Week in May.

PRAEP has offered training to teachers and community members that facilitate project initiatives in public schools and special communities. With the DOE After-School Program, PRAEP provided WAIT Training, Game Plan curriculum and PYD strategies to middle and high school students. The mass media campaign targeting teens, "La Otra Cara del Sexo" ended in Dec 2007. Its website and information phone line continue. A new mass media campaign targeting parents is in progress. Five interactive workshops for parents and teens reached 1,078 participants. Coalition development and community outreach efforts continues. Alliances with community based organizations were established.

c. Plan for the Coming Year

The PYD Action Guide developed by "Reto y Esperanza" will be used to conduct a train the trainer intervention in order to prepare 6 adult youth workers and 6 youth leaders to become PYD Promoters. They will be expected to disseminate PYD in government agencies, non government

entities and community scenarios. The MCH SISA staff will also be trained as PYD Promoters in order to cover all PR health regions. The PYD Action Guide will be made accessible to public agencies and community level entities interested in implementing the model. The achievements of the community-based pilot project on PYD in Naranjito will be evaluated and a decision will be made regarding its continuation.

SISA Program's Juvenile Health Promoters Project will continue in public schools with the support of the 8 Regional SISA Coordinators. The adaptation of their curriculum guide "Jóvenes Saludables en Acción" to fit the PYD model will be completed and pilot tested. Collaboration with the PR Education Department will continue to develop the PYD Health Promotion Schools Initiative in participating JHPP Schools. SISA collaboration with programs that provide services and support for pregnant and parenting teens will continue. HVN will continue offering interconceptional services to their adolescent participants to promote they space their future pregnancies. A qualitative study to identify factors that lead 15-19 year old girls to get pregnant will start in Bayamón MCH region.

Depending on the availability of funds, PRAEP will continue to implement the activities mentioned above. The new mass media campaign that encourages parents to talk to their children about sexual abstinence will be launched. The second Leaders for Wise Decisions workshop, in collaboration with the Corporation Pro Arts in Education (COPAE), the Office of Special Communities (OSC), and the DOE, will take place with an expected participation of 100 adolescents.

Performance Measure 09: *Percent of third grade children who have received protective sealants on at least one permanent molar tooth.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	15	20	10	6	6.5
Annual Indicator	4.6	5.9	4.7	3.7	5.1
Numerator	5087	7067	5599	4283	5805
Denominator	110950	119976	118237	117161	114666
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	7	7.5	8	8.5	9

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Data regarding the grade in which the children are enrolled is not available in the billing forms. The reported number is an estimation based on the information provided by the Health Insurance Commissioner and the Administration of the GIP that reflects the number of 8 to 9 year old children who received protective sealants on at least one permanent molar tooth during the last year (2006).

Data on the denominator is the estimated population of children of 8 and 9 years old in PR according to the US Census.

We recommend that this performance measure be revised to include age instead of grade in school.

Notes - 2005
Data regarding the grade in which children are enrolled is not available in the billing forms. Reported number is an estimation based on the information provided by the Health Insurance Commissioner and the Administration of the GIP that reflects the number of 8 to 9 year old children who received protective sealants on at least one permanent molar tooth during the last year (2005). This data will be collected in a study planned for this year.
Data on the denominator is the estimated population of children of 8 and 9 years old in PR according to the US Census.

We recommend that this performance measure be revised to include age instead of grade in school.

a. Last Year's Accomplishments
As a result of the implementation of the Health Care Reform in Puerto Rico, all individuals under 200% of the poverty level qualify for a government health insurance plan. It provides limited dental coverage; however, it does include the application of sealants on permanent molar teeth. Access to dental services for GIP beneficiaries does not require a referral from their PCP. A significant proportion of children with private health insurance also have access to dental care. One of the preventive measures usually included in their benefit packages are sealants for permanent molars.

In order to assess the number of third grade students who benefit from having sealants applied to their permanent molars, the MCH Division decided to conduct an epidemiological study. It was designed to determine the prevalence of sealants in a representative sample of third grade students enrolled in public and private schools in the Island. Additional information obtained during their oral health exam included the determination of the number of untreated and treated cavities and the absence of a primary molar tooth. In order to gather information regarding their dental health hygiene habits and practices, parents of these children were asked to complete a questionnaire. It included questions related to: use of fluoridated paste, dental visit within the past 6 months, age at first dental visit, sleeping habits, past history of dental caries, dental health insurance status and frequency of dental brushing.

During the planning phase of the study parental consent forms, data collection instruments and a brochure with information on how to achieve and maintain good oral health were prepared. The brochure paid particular attention to the importance of using sealants to prevent cavity formation and promote tooth preservation. A representative sample of third grade students was selected using a stratified methodology. A total of 60 schools in 40 municipalities and 1995 students were included in the sample.

In order to conduct the clinical evaluations a collaborative agreement was established with the University of PR, School of Pediatric Dentistry Residency Training Program, the General Practice Dental Residency and the PR Department of Health, Oral Health Program. By October 16, 2006, collaborative agreements had been established and we were able to begin the study. A total of 57 schools in 40 municipalities throughout the island were visited and 1,331 students evaluated. The data gathering phase ended on May 2, 2007. Ten licensed dentists participated in the study.

Information regarding oral health practices of these third grade students was obtained by means of a self-administered questionnaire completed by their parents. All participating students received a brochure entitled "Healthy Smiles, Beautiful Smiles". It contained information to promote healthy oral habits and the use of preventive measures such as: starting regular dental

visits early, frequent brushing using fluoride toothpaste and dental sealant application. The brochure also informed parents these services are included in the GIP insurance package. A total of 5,000 of these brochures were distributed.

In 2007, the Division of Oral Health Services visited public elementary schools and provided services to 78,334 students. During their interventions, oral health professionals stress the importance of dental sealants to parents who attend the activities. They advise parents that dental services such as sealants are covered by the GIP and no PCP referral is required in order to access dental services. They also provide educational material with messages that promote healthy oral habits to prevent future dental disease and information on the oral health services included within the GIP package.

Home Visiting Nurses and Title V Community Health Workers promote the use of oral health services that are available through the GIP. During FY 2006-07, MCH staff offered 89 activities promoting oral health in the pediatric population. A total of 1,065 persons attended these sessions. Topics included were: good oral health practices, preventing cavities and the benefits of having dental sealants.

Head Start 2007 report shows that dental cavities are the most prevalent health condition among their participants. Among Head Start children, 18.7% had dental cavities.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Raise awareness among elementary school children and parents about the importance of protective sealants.			X	
2. Disseminate educational materials concerning the importance of protective sealants.			X	
3. Improve data collection mechanism to monitor this performance measure.				X
4. Disseminate the results of the recently completed oral health study among health professional and school staff so they can become aware of the importance of promoting behaviors and interventions to improve oral health.			X	
5. Promote the development of an oral health policy to improve pregnant women and children oral health.				X
6. Include oral health referrals in the revised EPSDT schedule.				X
7. Promote the use of the oral health risk assessment tool among health care providers.			X	
8. Train HVN in the use of the oral health risk assessment tool.				X
9.				
10.				

b. Current Activities

Data gathered in the study has been entered and analyzed. The study concluded that the prevalence of dental sealants among third grade students in PR was 17.1%, which is less than the 29.5% reported US rate for children 6 to 11 years of age. Thus, we found available preventive measures such as sealants are underutilized despite wide dental health insurance coverage (94%) and that cavities were more frequent in children from low income families. Students from public schools and those holding a government sponsored health plan were less likely to have dental sealants.

This study also identified being less than 5 years of age at first dental evaluation and presence of

sealants as protective factors for cavities, and having the last dental visit more than six months ago and going to sleep with a bottle as risk factors. Results were shared with staff that collaborated in the study and presented as a poster during in the MCH Epi Conference.

Our staff is encouraging the use of this underutilized service at the community level. The Division of Oral Health continues to promote use of dental sealants and healthy oral health habits during their school visits. The local preventive pediatric guidelines are being revised using Bright Futures recommendations and they are expected to include dental home referrals for all infants and children.

An MCH Oral Health Clinic has been established. Their staff will train us and DMDs on how to treat and prevent oral health conditions.

c. Plan for the Coming Year

The results of this study will be disseminated among oral health care professionals, pediatricians, child care providers and school officials. A plan of action will be established to promote healthy oral behaviors and the use of preventive interventions that can help improve the oral health status of children in PR.

Based on the findings, we will work in two distinct but complementary directions. The first is to educate families and communities on good oral hygiene practices and to empower them to request preventive dental procedures currently covered under the GIP. As part of these efforts we will educate elementary school children and their parents regarding the availability of dental sealants as a measure to prevent dental cavities and the fact that the GIP plan includes this benefit. Promoting dental sealants among parents of low income children will be important since results revealed a disparity in dental sealant prevalence based on socioeconomic status. We will focus our efforts toward families visiting the WIC and Medicaid offices in search of assistance.

The second area is increasing the number of providers that are willing to treat young children. Currently, PR has a limited number of dentists specialized in treating pediatric patients and they are unevenly distributed throughout the Island. Therefore, in order to increase the number of preventive oral health interventions such as dental sealants that are administered, we must increase the number of general dentists that are willing to evaluate and treat young children. Currently, this issue is being addressed by the UPR School of Dentistry MCH Oral Health Clinic staff. They are inviting general dentists to attend a full day of in-service training in their clinic with the purpose of allowing them to acquire the knowledge and skills they need to feel comfortable treating small children.

The Division of Oral Health Services staff will work to increase the level of awareness among parents about the importance of having their children receive dental sealants. They will continue to visit public elementary schools to educate children on the good oral health practices and the use of dental sealants to prevent cavities.

Our MCH staff will work to increase awareness among parents that dental sealants are covered by the GIP and encouraging them to request their application when their school aged children visit the dentist. MCH staff will share this information when they participate in community and school based activities.

Once properly trained, HVN will begin using the oral health risk assessment tool with their participating families.

We will work to establish a public policy that will reduce oral health risk factors and promote good oral health beginning in early childhood. It should promote dental sealants application, first dental evaluation < 5 years of age, dental homes and avoiding placing children to sleep with a bottle.

Performance Measure 10: *The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	2.3	2.2	1.9	1.8	1.7
Annual Indicator	1.9	2.8	1.3	1.0	1.0
Numerator	17	24	11	8	8
Denominator	882134	865067	851730	839172	825576
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Provisional	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	0.9	0.9	0.9	0.9	0.9

Notes - 2007
For source of information refer to 2006 notes.

Data provided for 2006. Vital Statistics data for 2007 is very preliminary. Data provided by Police and Institute of Forensic Science shows no significant change compared to 2006 data. Once 2007 data is final it is expected to resemble 2006.

Notes - 2006
Numerator Source: Office of Informatics and Technology Advances (OITA) of the Department of Health.
Denominator Source: US Census

Notes - 2005
Numerator Source: Office of Informatics and Technology Advances (OITA) of the Department of Health.
Denominator Source: US Census.

a. Last Year's Accomplishments
For over a decade our vital statistics reports have had unintentional injuries as the principal cause of death for children 1-14. Most of them were the result of MVC. In 2006, VS revealed 8 deaths due to MVC in this age group. During FY 2006-07, the Automotive Compensation Administration (ACAA) data reported 10 deaths and 4,662 injuries related to MVC for children 0 to 14. Among the 10 dead, 7 were passengers and 3 pedestrians. Thirty (30) of those injured were children 10-14 years of age who were drivers at the time the collision occurred. Twenty-two of these drivers were males. Sixteen percent of those injured were pedestrians.

For 2007, the PR Institute of Forensic Medicine reported nine children under 14 died as a consequence of being involved in a motor vehicle collision (4 males and 5 girls 1-14 years of age). Five were pedestrians, 1 cyclist and 3 passengers. The official Police Department report

indicates one child passenger and three pedestrians under 9 years of age died in 2007. According to them, 62% of all deaths regardless of age occurred during weekends and between the hours of 6pm-3am. Approximately 40% of these deaths were caused by drunk drivers.

PR Law 22 of 2000 reduced to less than .08 % the permissible blood alcohol level for drivers. This legislation also requires the use of car seats and seat belts, and increases fines for traffic violations to further deter any violations. The PR Highway Safety Commission (HSC) data reflects approximately 92% of drivers use seat belts and 86% use car seats.

Reducing unintentional injuries among infants, children and adolescents is one of the 10 priorities established by the PR MCH program. The Safe Kids Coalition leads local collaborative efforts to reduce the number of MVC deaths. Members of the SKC include several public and private entities such as the Police Department, the Highway Safety Commission, the Fire Department, PR Consumer Affairs Office, the Department of Education, EMSC and the MCH program, among others.

The SKC held several injury prevention activities around the Island. They included distribution of educational materials in health fairs, car seat security demonstrations and check points and inspection of cars seats for appropriate installation. They also participated in health fairs held at the House of Representatives, Guaynabo Municipality and Saint Patrick's Day parade. During these activities, injury prevention educational materials were distributed to 5,300 participants.

The HSC held various community based activities directed at reducing MVC. These were: Child Passenger Safety Month educational activities about child car seat and use of seat belts, and the Highway Safety Week. They have 125 car seat inspectors and 42 car seat inspection sites. Their NSC certified safety coordinators offered public and private school students lectures on highway safety and promoted compliance with current laws. They provided high school students the opportunity to use special goggles to experience what happens when one drives under the influence. They reported 14,500 children participated in their highway safety educational parks. During the period of May 14-June 3 the Police Department increased their efforts to identify and ticket passengers without seat belts.

The MCH staff continually disseminates information directed at preventing MVC related deaths, such as the way to properly install car seats and driving under the influence of alcohol. The HVN provide age and developmentally appropriate anticipatory guidance to their HVP participants on a regular and consistent basis. Perinatal nurses stress the importance of correctly using the car seat as they educate mothers whose infants are being discharged from the nursery. Several agencies loan or provide free car seats if requested. During FY 2006-2007, regional staff offered a total of 225 educational activities on the importance of using car seats, seat belts, and highway safety rules to 1,682 participants. An additional 2,732 persons received injury prevention messages through educational activities.

Our staff analyzed VS data and reports related to MVC deaths according to sex, age and other demographic variables. The information was shared with the SKC, EMSC program, service providers and the general population in order to raise their level of awareness on the issue.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Promote adequate use of child restraints as part of the anticipatory guidance given at the community level.			X	
2. Inform families with limited resources about local programs that rent or provide free infant car seats.		X		
3. Reactivate the PR Safe Kids Coalition and review its action				X

plan.				
4. Train Perinatal Nurses in the installation process and inspection of car seats.				X
5. Disseminate fliers and brochures to inform the public actions they may take to prevent MVC related injuries and death.			X	
6. Disseminate a report with the results of the 2005 unintentional injuries related deaths in children and adolescents data analysis.				X
7. Continue collaboration with MADD (Mothers Against Drunk Driving) and other organizations to reduce driving under the influence of alcohol.				X
8. Disseminate information to adolescents about MVC prevention and alcohol use as a contributing factor in MVC fatalities.			X	
9. Continue to support initiatives leading to increasing the legal age for alcohol use to 21 years old.				X
10. Promote the institution of a comprehensive driver education program.				X

b. Current Activities

The Division has taken the lead to reinvigorate the SKC coalition. In 2008 it began meeting every month. We are currently reviewing available unintentional injury data from member agencies. Our Epidemiologist analyzed and presented 5 years of injury related VS data. The Poison Control Center shared their 2007 cases data regarding type, intentionality and lethality of the exposure. Once all available information is presented, SKC will evaluate evidence based interventions and develop a strategic plan to prevent unintentional injuries.

We are collaborating with the State Epidemiologist's efforts to establish an Injury Surveillance System. Our Division will be in charge of its pediatric component. The SSDI Coordinator and MCH Director are part of the Surveillance System Advisory Group.

The SKC has sponsored several injury prevention activities such as distribution of educational materials in health fairs, car seat safety demonstrations, check points and inspection of 115 cars seats for appropriate installation. In October 2007, a "Walk this Way" activity was held in a 600 students school located in a high traffic area. It allowed parents and students to learn ways to get to school safely.

Perinatal nurses stress the need to correctly and consistently use car seats beginning when they are discharged from the nursery. CHW conduct interventions to prevent MVC related injuries.

A PRHSC sponsored mass media campaign to promote seatbelts and car seats use aired May 2008.

c. Plan for the Coming Year

We expect to complete the SKC strategic plan during this year. We expect the plan will focus on MVC related deaths prevention since it is the most frequent cause of death due to unintentional injuries. In collaboration with the Departments of Education, Police, Fire, Family Services, Emergency Medical Services for Children Program, HSC, PR Consumer Affairs Office, Rotary Clubs, MADD PR chapter, ACAA and the WIC Program, we will work to promote evidence based strategies to prevent motor vehicle crashes injuries, deaths and other unintentional injuries.

MCH personnel will continue to join with and support Safe Kids Coalition efforts to provide educational activities that stress the importance of correctly installing and using car seats every time children travel in a motor vehicle and to promote compliance with, and enforcement of, laws that requires children be restrained while riding in a car, safety approved helmets are used correctly, and promoting drivers abstain from drinking and driving. The SKC will continue to

promote the correct and consistent use of infant safety seats in parades, special public events and while conducting car seat check points near schools and in shopping malls. The HSC plans to train police officers in car seat installation and inspection.

Perinatal nurses will receive a refresher course on how to correctly install and inspect car seats so they can continue to help parents whose infants are being discharged from the nursery use their car seats correctly. A special effort will be undertaken to provide the CSHCN population information regarding safe transportation and informing them of existing laws requiring child restraint and seat belt use. Adolescents will also continue to receive HSC trainings in their schools and MCH staff will stress the importance among them to abstain from drinking alcohol if they are driving. MCH will support laws to increase the legal drinking age, lower legal BAC level, delay adolescents' ability to drive without supervision and to establish a driver education course requirement.

In October 2008, the SKC plans to hold 4 "Walk this Way" activities in public schools located in vicinities with large traffic volumes. During the activity SKC members analyze traffic flow patterns during peak traffic activity periods and then submit school officials, parents and students their recommendations to improve traffic patterns and make behavior modification recommendations to reduce school related MCV injuries and death.

MCH staff will provide educational activities in schools and at the community level. HVN will provide MCV injury prevention messages to the families they serve. We will continue to work towards establishing an Unintentional Injury Surveillance System. The EMSC Program will continue to promote safety and injury prevention messages at the community level. Their Emergency Medicine Symposium will continue to educate providers on issues related to pediatric injury prevention and treatment.

Performance Measure 11: *The percent of mothers who breastfeed their infants at 6 months of age.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective				12.5	13
Annual Indicator			21.7	26.5	26.5
Numerator			89	185	185
Denominator			410	697	697
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Final
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	28	29	30	31	32

Notes - 2007
Data provided was obtained from the 2006 ESMIPR.

Notes - 2006
In 2005 we inadvertently reported for the annual indicator in this performance measure the value that corresponded to the percent of breastfeeding infants at 12 months of age. The correct value for 2005 was 22 percent as reported in the narrative part. The data was provided from ESMIPR 2004. The 2006 data was obtained from the 2006 ESMIPR (PRAMS like survey) follow up

telephone interview conducted by the MCH Division of the PR Department of Health six months after the initial postpartum survey.

Notes - 2005
Numerator and Denominator obtained from the ESMIPR (PRAMS like survey) follow up telephone interview conducted by the MCH Division of the PR Department of Heath six months after the initial survey.

a. Last Year's Accomplishments
Ever since the Puerto Rico Department of Health established a public policy to promote breastfeeding in 1995, the MCH Program and the Breastfeeding Promotion Committee have been working to provide women of childbearing age the support they need to breastfeed. Special emphasis has been placed on promoting breastfeeding during the prenatal and immediate postpartum periods, since they are believed to be crucial periods for establishing breastfeeding practices that can continue for the first six months of life and, hopefully, throughout the entire first year.

We have endorsed compliance with laws that protect the rights of breastfeeding mothers. Law 155 approved in 2002 that requires all workplaces that provide services to the public must have a room designated for exclusive use of women who want to breastfeed, express or store their milk during work hours. The MCH Division has been providing technical assistance regarding compliance with this requirement to those institutions that requests it. Law 79 of 2004 prohibits hospital staff from supplying formulas to newborns and infants without a doctor's order and the mother's consent. We have distributed nearly 4,000 posters and 200,000 brochures regarding Law 79 provisions to obstetrical and pediatric hospital facilities, child care centers and health providers' offices. Two additional laws also promote breastfeeding. Law 156 approved in 2006 recognizes women's right of being informed about the benefits associated with breastfeeding and receiving the support needed to initiate and continue this practice. Law 239 approved in 2006 increases to one hour the time allowed for mothers to breastfeed or extract their milk in the workplace.

Since 2000, the MCH Division has monitored breastfeeding rates using a PRAMS-like survey, called ESMIPR. This study gathers information on breastfeeding every two years by means of a self-administered questionnaire answered by women during the immediate postpartum period. Follow-up telephone interviews are conducted 6 and 12 months after the initial interview to the same group of participants. Since the survey began, data has been showing a steady increase in the number of women who breastfeed. The 2006 ESMIPR revealed 68.5% participants breastfed immediately at birth and 26.5% continued after 6 months. This represents an improvement when compared to the 2004 results, which showed 64.5% breastfed at birth, 22% at 6 months, and 12% at 12 months. Rates for 2002 were 54.3% breastfed at birth, 20.4% at 6 months, and 8.5% at 12 months.

The newly revised 2005 PR birth certificate now includes a question regarding breastfeeding practices. It will provide us with additional information to monitor trends in breastfeeding rates in postpartum women.

Breastfeeding is promoted during educational activities held at community level across the Island. We celebrated National Breastfeeding Week in Aug 2006. Among the activities held were regional breastfeeding fairs, a symbolic human "ribbon" event and other community level activities. A total of 435 persons participated in these events. Regional MCH and WIC staff joined forces to celebrate 5 major events that reached 1,565 pregnant and breastfeeding women.

A total of 15 "Comenzando Bien" prenatal courses were offered. They were attended by 218 pregnant women and their partners. Breastfeeding was one of the topics covered during the course. Eight perinatal nurses and CHW's provided 1,048 individual counseling and group activities on the topic of breastfeeding reaching 5,775 persons. HVN provided educational

activities and individual counseling regarding breastfeeding practices to 6,390 pregnant and interconceptional women participants of the HVP.

The DoH Breastfeeding Promotion Committee continued to promote strategies aimed at increasing the number of women who continue to breastfeed their infants during the first 6 to 12 months of life. Seven meetings have been held. We continue to strengthen collaborative efforts among key partners in order to continue the work of promoting universal breastfeeding in PR. Members have been participating in CDC and USBC sponsored teleconferences directed at encouraging partnerships and forming coalitions nationwide.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue monitoring breastfeeding practices by collecting related data during immediate post partum period and when the infants are 6 and 12 months of age using the PRAMS-like Maternal and Infant Health Survey ESMIPR every two years.				X
2. Establish liaisons with other programs such as WIC and DoH Immunization Program to collect data regarding breastfeeding practices among their participants.				X
3. Disseminate the progress being made in breastfeeding rates by sharing data from the ESMIPR study and other sources in the DoH web page and an MCH Health Status Book.				X
4. Continue endorsing public policy and laws that protect mothers' and children's breastfeeding rights in Puerto Rico.				X
5. Offer technical assistance to health facilities attempting to adopt rooming-in as a strategy to increase breastfeeding initiation and help them become committed to continue the practice for the baby's first six months of life.			X	
6. Include breastfeeding as one of the topics to be included in the prenatal courses being offered to pregnant women and their significant others island wide.			X	
7. Continue providing group orientations at the community level to promote breastfeeding practices.			X	
8. Continue raising awareness of the importance of breastfeeding among the participants of the Home Visiting Program through educational activities and by providing them one-to-one counseling.				X
9. Continue collaborating with other key partners like WIC and LACTA Project to promote breastfeeding at all levels.				X
10. Convene the Breastfeeding Committee at least every two months.				X

b. Current Activities

Data from the 2006 ESMIPR revealed the breastfeeding rate at 6 months was 26.5%, a 4.5% increase compared to the 2004 rate. The 12 month rate was 13%.

The Mayagüez Region held the 5th fair to celebrate National Breastfeeding Promotion Week in Aug 2007. A total of 228 persons participated, including 86 pregnant and 9 breastfeeding women. So far, MCH staff has provided 26 prenatal courses in which this topic has been included. A total of 292 pregnant women and their partners participated in them. CHW's and perinatal nurses have offered 270 group events and individual counseling related to breastfeeding to 2,256 persons. During 2007, HVN provided one-to-one prenatal education on breastfeeding to 6,390 women

participating in the HVP. MCH staff from 6 regions teamed up with WIC Program staff to hold events related to BF during this period and reached 1,586 persons.

The DoH BF Promotion Committee met 7 times. The Committee has been studying the possibility of adding questions about breastfeeding to the Immunization Survey, and including a attachment regarding breastfeeding during an emergency to the DoH Emergency Plan. Members have participated in 6 USBC teleconferences. Four members participated in the 2nd National Conference of State/Territory Breastfeeding Coalitions in Virginia in Jan 2008.

The Committee prepared a fact sheet that includes information on current laws that relate to breastfeeding that will be distributed to health care providers and to the population at large.

c. Plan for the Coming Year

During the next year, the MCH Division will continue to promote compliance with all the public policies and laws that promote breastfeeding practices in all settings, mainly in hospitals. We will also promote respect of the mother's right to breastfeed.

This year we will focus our attention to hospitals that have low breastfeeding rates. Committee members will assist MCH staff as they attempt to identify and remove barriers to breastfeeding that occur at the hospital level. Some of the barriers they may be facing are: the negative attitudes some employees have toward this practice and resistance to implementing the rooming-in policies. Once these issues are resolved, we expect to see an increase in breastfeeding rates during the early post partum period and the continuation of this practice throughout the infant's first year of life.

The MCH Program will maintain health providers and the community informed of current breastfeeding laws in PR. The fact sheet prepared by the Committee that includes information on current laws will be distributed by MCH staff at the regional level.

The Breastfeeding Committee will meet every two months. In order to increase public awareness regarding the benefits breastfeeding provides and to inform the general public regarding the recently approved laws (#239 and #156) related to breastfeeding, they will help the MCH Division develop several educational materials. We will continue to support WIC and LACTA Project in their breastfeeding promoting activities.

The Committee will prepare an attachment for the DoH Emergency Plan that will guide breastfeeding practices during an emergency. It will provide guidance to emergency response personnel when they come in contact with breastfeeding mothers and their infants. In addition we will attempt to add questions regarding breastfeeding practices to the Immunization Survey.

CHWs will continue to offer prenatal courses that include breastfeeding promotion messages. Perinatal nurses will also promote the practice during their one-to-one interventions and group orientations in the hospital setting. Home Visiting Program participants will have the opportunity of receiving individualized one-to-one prenatal education on how to begin or continue breastfeeding their infants.

The MCH Program will share breastfeeding information with health providers, particularly prenatal and perinatal specialists, nurses, and pediatricians in PR by including it in the DoH web page, and in the MCH Health Status Book. In this publication we will highlight the progress we have made toward increasing breastfeeding rates in PR.

Performance Measure 12: *Percentage of newborns who have been screened for hearing before hospital discharge.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	5	15	50	80	90
Annual Indicator	6.9	25.3	74.5	85.0	97.5
Numerator	3499	12989	37774	41425	44965
Denominator	50803	51239	50687	48747	46096
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	98	98	98	99	99

Notes - 2007
Denominator: The number of births reported for 2007 is based on the number of births registered in the Demographic Registry Office through the Inscriptions Report. The annual performance objectives for 2008 to 2011 were revised. Annual performance objective for 2012 was added.

Notes - 2006
Denominator: The number of births reported for 2006 is preliminary and is based on the number of births registered in the Demographic Registry Office. The annual performance objectives for 2007-2011 were revised.

Notes - 2005
Denominator: The number of births reported for 2005 is preliminary and is based on the number of births registered in the Demographic Registry Office.

a. Last Year's Accomplishments
One of our objectives last year was to maintain or increase above 85% the percentage of newborns screened for hearing loss and to monitor follow up services for identified newborns. The percent of screened newborns increased from 85% in 2006 to 97.5% in 2007. The significant increase in the percentage of newborns screened for hearing loss before hospital discharge in PR may be explained by several factors. The CSHCN Section of the PRDOH has been very active in promoting birthing hospitals to comply with Law #311 and Regulation #114 enacted on 2003 and 2004, respectively. The Service Coordinator and the Audiologist visited participating hospitals to provide education about both the law and regulation and to inform them about their responsibilities in screening and reporting cases to the PRDOH. The Service Coordinator has been providing consistent follow-up to hospitals in reporting the cases on a monthly basis. The PCANU program established effective communication channels with hospitals' contact persons and audiologists. The program has also made random hospital visits to evaluate their hearing screening process and to make recommendations for improvement.

Another objective was to increase the number of children identified by hearing screening tests who received appropriate follow up services. The UNHSP Service Coordinator provided support to families of newborns identified through initial screening to assure that diagnostic testing was performed by 3 months, and that treatment was received before 6 months of age. To monitor progress the UNHSP used information from CANU Online, participating hospitals, families of identified children and other government programs.

CANU Online was the principal mechanism used to monitor whether identified newborns received

follow up services for diagnostic testing. During 2007, 38 of 40 birthing hospitals entered data into the tracking system and 39 audiologists were registered in CANU Online. The UNHSP gradually increased follow up monitoring with the collaboration of the Service Coordinator. The UNHSP actively encouraged and trained community audiologists and birthing hospitals to use CANU Online for follow-up data entry. Follow up information was entered manually by the Service Coordinator during 2007.

Data for 2007 indicated that 44,965 out of 46,096 newborns were screened for hearing loss and, of these, 1,117 (2.5%) were identified with possible hearing loss.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Provide follow up tracking to increase the number of newborns who have the audiologic evaluation before three months of age.		X		
2. Develop promotional activities to create awareness of UNHSP in the general population.			X	
3. Supervise UNHSP in hospitals to maintain high quality services.				X
4. Provide information about UNHSP to audiologists, speech language pathologists, nurses and physicians.				X
5. Collaborate in the development and implementation of the UNHSP programs at all birthing hospitals in PR.				X
6. Implement the UNHSP data tracking system to document follow up services.				X
7. Update the UNHSP program website to deliver information regarding UNHS and the UNHSP program.				X
8. Establish support groups for families of newborns identified by the UNHS Program.		X		
9.				
10.				

b. Current Activities

Promotional and educational activities are being implemented to raise awareness among the general population and health professionals regarding the existence of the UNHSP reporting requirements, laws, regulations, required procedures and suggested protocols. Particular emphasis is placed on the importance of infants receiving treatment before 6 months of age. UNHSP continues to educate and empower pregnant women to seek information about newborn hearing screening services in the birthing hospitals of their choice.

The UNHSP is working to increase the level of culturally competent support that families of identified newborns receive in order to assure diagnostic testing is performed by 3 months and treatment received by 6 months of age. To monitor progress on this issue we are using information from CANU Online, participating hospitals, UNHSP and families of identified children and other government programs.

For 2008, the percent of screened newborns is expected to remain at the current level of 97.5%; it could go higher if we increase the number of hospitals entering data in CANU Online. Some of the barriers we are currently working on to increase the use of CANU Online are the lack of equipment, trained staff availability and time restrictions. These barriers affect the hospitals' and community audiologists' decision to adopt CANU Online. However, the program continues to identify strategies that may facilitate their use of this service.

c. Plan for the Coming Year
The UNHSP will continue its efforts to increase the number of children identified by hearing screening tests who receive appropriate follow up services. To achieve this, we will attempt to implement the strategies recommended by the National Initiative for Child Health Quality (NICHQ) learning collaborative, as they were found to be effective in reducing the number of infants and families that are lost to follow up. Promotional and educational activities will continue to raise awareness among the general population and health professionals of the existence of the UNHSP reporting requirements, laws, regulations, required procedures and suggested protocols. An annual stakeholders meeting will be held for all those who participate in the UNHSP. Particular emphasis will be placed on the importance of infants receiving treatment before 6 months of age. We will continue to educate and empower pregnant women to inquire about newborn hearing screening services in the birthing hospitals of their choice.

The UNHSP will work to increase the level of culturally competent support that families of identified newborns receive in order to assure diagnostic testing is performed by 3 months and treatment received by 6 months of age. To monitor progress on this issue we will be hiring a family advocate who will assist the Service Coordinator in contacting families for orientation and follow up service and will be responsible for organizing a family-support group.

Performance Measure 13: *Percent of children without health insurance.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	1	1	1	1	1
Annual Indicator	1.1	1.3	1.6	0.3	0.4
Numerator	15012	15136	18384	3407	4522
Denominator	1364807	1164353	1149039	1135559	1121697
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	0.3	0.3	0.3	0.3	0.3

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
The estimate for this performance measure was done using the Head Start health insurance data. According to this data, 0.34% of enrolled children did not have a health insurance plan. We assume that Head Start children are low income children in Puerto Rico. They represent the maximum number of children without health insurance. The denominator was the population estimation (0-19 years old) as of July 2006 and was obtained from the US Census Bureau.

Notes - 2005

The estimate for this performance measure was done using the Head Start health insurance data. According to this data, 1.6% of enrolled children did not have a health insurance plan. We assume that Head Start children are low income children in Puerto Rico. They represent the maximum number of children without health insurance. The denominator was the population estimation as of July 2005 and was obtained from the US Census Bureau.

a. Last Year's Accomplishments

The MCH Division calculates the percent of children without health insurance using data from children enrolled in Head Start. Their data is used as proxy to estimate it because to qualify for Head Start they must be from a low socioeconomic background and therefore less likely to be insured. During FY 2007-2008, out of the 40,187 preschool children enrolled in the Head Start Program, only 162 (.4%) had no health insurance. Among the rest, 79.7% were insured by the GIP and 19.9% were privately insured. Based on these results, we estimate that approximately 4,522 out of the 1,121,697 children and adolescents living in PR did not have health insurance in 2007.

Other studies performed by the MCH Program have provided additional information regarding the number of uninsured children living in the Island. The Oral Health Evaluation Study revealed that 2.2% of third grade students were uninsured at the time of the study (2006-2007). Provisional data obtained from the Department of Education revealed that in 2006, 0.5% of children attending in Kindergarten were uninsured.

This low uninsured rate may be explained by the fact that all children under 19 years of age living in families with incomes below 200% FPL are eligible for the GIP. In addition, PR families will take extreme measures and make economic sacrifices in order to provide health insurance for their children. Frequently, young children are included in other family member's health insurance plan, particularly in cases where parents are uninsured and cannot afford to have health insurance.

Last year several attempts were made to gather additional information regarding this indicator. We met with the Behavioral Risk Factor Surveillance System (BRFSS) Coordinator, Puerto Rico Health Survey (PRHS) staff and marketing research agencies to evaluate the possibility of designing a study that would allow us to estimate the prevalence of children without health insurance and identify the impact this had on their health status. However, lack of funds prevented us from conducting the study.

During their visit to participants' homes, Home Visiting Nurses determine their health insurance status. A total of 187 women received a referral to the Medicaid Program and their children 2 years old or less were uninsured and were referred to the Medicaid Program.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Conduct outreach activities to identify children without health insurance and refer them to Medicaid for evaluation and qualification.		X		
2. Include questions in other MCH sponsored studies that would allow us to determine the prevalence of uninsured children in the 0 to 19 years age range.				X
3. Use the PR Health Survey data to evaluate the health status of uninsured children.				X
4. Obtain information regarding the health insurance status in a random sample of students attending grades 2, 5, 8, 11 in public and private schools in PR who will participate in a study to determine the prevalence of obesity.				X

5.				
6.				
7.				
8.				
9.				
10.				

b. Current Activities

MCH Program staff, particularly the CHWs, devote most of their work days to performing outreach activities in health fairs, school venues and at the community level. They are constantly trying to identify pregnant women, children and adolescents with no health care insurance and ensuring they receive GIP insurance benefits if eligible. During this year our 72 CHW's continued to identify Medicaid eligible children and link them with the Medicaid offices closest to their homes.

Determining the health insurance status of Home Visiting Program participants and their family members is one of the first tasks the 93 HVN's perform when they enroll new clients into the HVP. Those without insurance receive an immediate referral to the Medicaid Program.

Since 2005, the Department of Education of PR has been sharing with us data regarding BMI, BP and health insurance status of kindergarten and seventh grade students. The final analysis of the data included in their 23,728 records revealed that 0.4% of kindergarden students and 0.9% those in 7th grade had no insurance. A question regarding health insurance status has been included in the questionnaire that will be administered when the obesity study is repeated during school year 2008-2009.

c. Plan for the Coming Year

The MCH Program will analyze data from the Puerto Rico Health Survey (PRHS) from 2001 to 2003. This analysis will allow us to estimate the prevalence of uninsured children in Puerto Rico. Other factors such as morbidity and hospitalization, school absenteeism and physical health status will be evaluated by comparing uninsured children with the insured. We will explore the possibility of estimating how many uninsured children could potentially benefit from GIP. Although PRHS is a secondary source of information, we expect it can provide us valuable information about uninsured children in Puerto Rico.

The MCH Division Acting Director and staff are leading the Alliance for Healthy, Active and Well Nourished Children (AHAWNC) efforts to conduct a study that will allow us to estimate the prevalence of overweight and obesity in children included in a representative sample of second, fifth, eight and eleventh grade students attending public and private schools in Puerto Rico. The study is scheduled to begin during the 2008-09 school year. As part of the study, a questionnaire to gather information regarding their eating habits and physical activity level of the child and his/her family will be distributed. It will include questions that will allow us to determine their health insurance status.

The MCH Program, CHW's and HVN's will continue reaching out to children and families without health care insurance and provide them with referrals to the Medicaid Program.

Performance Measure 14: *Percentage of children, ages 2 to 5 years, receiving WIC services with a Body Mass Index (BMI) at or above the 85th percentile.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective				13	39
Annual Indicator			40.3	41.6	39.7
Numerator			40159	35112	30647
Denominator			99649	84388	77219
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	38	37	36	35	34

Notes - 2007
Data for 2007 calculated based on data provided by PR WIC Program of the PR Department of Health for the period of October 2006 to September 2007.

Notes - 2006
Data provided by the PR WIC Program of the PR Department of Health.
Data for 2006.

Notes - 2005
Data provided by the PR WIC Program of the PR Department of Health.

a. Last Year's Accomplishments
PR has experienced an increase in the prevalence of obesity in the population and physicians have noted an increase in DM type 2 in the pediatric population. According to the 2007 BRFFS, 64.9% of adults in PR have a BMI over 85%. Revised 2007 WIC program data reported 41.6% of children ages 2-5 enrolled in their clinics had BMI's at or above the 85th percentile.

In 2005, a landmark study was conducted in PR to measure the severity of the problem among school aged children. This study was conducted by representatives of the MCH Division, Department of Education, WIC, College of Physicians Medical Foundation, AAP, Nutrition Internship Program, School of Public Health and the Private Education Association. They determined the weight, height, age, sex and BMI of 3,026 second grade students of 100 private and 151 public schools in all 78 municipalities in PR, and classified them according to their nutritional status. Results showed 24% of second grade students were overweight, 16% were in the at-risk category and 2.7% were underweight. No statistical difference was noted by type of school, age or sex. The results showed the PR prevalence rate was higher than reported by CDC (16%) for children in a similar age group living in the US, but only slightly higher than observed among Hispanic children living in large urban areas in the U.S.

During 2006-2007, results were widely disseminated in several professional forums, media, private and public organizations in order to create awareness of the severity of the problem in PR. This led to two meetings with key stakeholders to establish coordinated efforts to control the epidemic. Participating in these meetings were representatives of the Education, Sports and Recreation, Housing Development, Agriculture and Health Departments, University of PR Medical Sciences Campus, Extension Program, Health Insurance companies, professional organizations, food industry, supermarket chains, pharmaceutical and hospital representatives. Four working groups were established initially: surveillance, monitoring and research; education; public policy and legislation; and environmental issues. With the exception of the environmental group, the rest have met regularly to establish a strategic plan to control the growing epidemic.

Two executive orders, OE-2006-33 and 34, signed by the Governor provided the framework for the "PR en Forma Program" and the establishment of a Steering Committee in charge of developing, implementing and evaluating its progress. The Governor's executive orders transferred $7.8 million to the program. These funds have been distributed to 72 municipalities that have established a wellness program. The PR Commission on Nutrition met regularly to culturally adapt the food pyramid for use with our local pediatric population.

Several weight control programs have been developed. The WIC Program conducted a pilot project with 3-4 year old clinic participants who had BMIs above the 85th percentile and their parents. The project provided parents six 2 hour didactic session on behavior modification techniques and how to improve their child's nutrition. Children had the opportunity to exercise during these 2 hours. Of the 101 children who completed the program, 48 lost or maintained their weight and 53 gained weight. However, those who gained weight did so at a reduced rate when compared to the previous 6 months.

During the school year 2006-07, the Transformer Club, a strategy developed by a Mayagüez Region MCH staff member, continued and expanded to the Aguadilla Region. It is the result of a collaborative effort between the Departments of Health, Sport and Recreation and Education. This program strives to help severely overweight middle school children achieve a healthy weight by providing them opportunities to increase their physical activity level and motivating them to modify their diets. It is one of the after school programs available for middle school students.

Our HVN and CHW have promoted healthy eating during their daily activities. During FY 2006-07, they offered 212 activities on this topic reaching a total of 2,227 persons. In addition, they promoted breastfeeding on 200 separate educational activities attended by 1,750 persons. The topic of childhood obesity was discussed on 9 occasions and reached 118 persons.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Establish an Alliance with the purpose of educating, designing and performing applied research and developing public policy to reduce the prevalence of childhood obesity in PR.				X
2. In collaboration with the Alliance, develop a strategic plan that will establish the course of action and strategies PR will undertake to control the childhood obesity epidemic.				X
3. Develop an infrastructure that will allow PR to establish a surveillance system to monitor changes in children's BMI and the increase in the prevalence of overweight/obesity trend.				X
4. Carry out an ethnographic study in the municipality with the highest prevalence of childhood obesity to identify social and cultural variables that contribute to the problem.				X
5. Design and conduct a study to measure the BMI of a representative sample of students attending grades 2, 5, 8 and 11 in PR. Administer a questionnaire that will help identify their dietary intake and physical activity.				X
6. Provide WIC the technical assistance they requested to evaluate the results of their project aimed at intervening with participants with BMI at or above the 85th percentiles.				X
7. Increase communication and collaboration among governmental, private and non profit agencies that are developing research and implementing interventions for the				X

reduction of overweight in children.				
8. Educate journalists, communicators, media, community representatives and the public at large on issues related to pediatric obesity and encourage healthy eating and daily exercise.			X	
9. Collaborate with other DoH secretariats and agencies in their obesity prevention efforts and health promotion activities.				X
10. Collaborate in the elaboration of a public policy to improve the nutritional status and increase the level of physical activity our children and their parents have.				X

b. Current Activities

By December 2007 the workgroups had completed their individual focus areas' strategic plans and met to formally join efforts by establishing the "Niños y Jóvenes Activos Bien Nutridos y Saludables" Alliance. The group established a shared vision, mission, strategies and selected its Board of Directors. The Acting MCH Director is the Investigation workgroup leader and will also be responsible for overseeing the pediatric aspects of the Alliance work.

Since then the workgroups (education, public policy and investigation) have continued to meet and work toward reaching their goals. The Investigation, Evaluation and Surveillance Group's main goal is to design and conduct a study to measure the BMI of a representative sample of students attending grades 2, 5, 8, 11 in public and private schools in PR. A questionnaire will be administered to help us identify students' dietary intake and physical activity. It is being reviewed by group members to insure it gathers information that can lead us to identify local risk factors for obesity.

An ethnographic study to identify social and cultural variables that contribute to the high prevalence of obesity in Gurabo is under way.

Our staff continues to promote physical activity, healthy eating and breastfeeding at the community level and during their home visits.

The WIC program replicated the project in 2 regions. Activities concluded in March and results are being analyzed. The Transformer Club expanded to 4 regions and 88 schools.

c. Plan for the Coming Year

We expect to begin the study in September 2008. It will be divided in two phases. During the initial phase (September-November 2008) we will visit elementary schools and during the second phase (January-April 2009) we will visit middle and high schools. It should help us determine the prevalence of overweight/obesity among students attending the second, fifth, eight, eleventh grades in public and private schools. We have selected a representative sample of 4,455 students attending 38 public schools and 54 private schools. The questionnaire developed for parents of students in the 2nd and 5th grade will be adapted for self-administration by students attending the eighth and eleventh grades. The final methodological procedures will be completed prior to the start of the new school year. The staff that will visit the schools will be selected and the equipment secured by August 2008.

The qualitative study "Low-Income Parents' Perceptions and Behaviors Related to Childhood Eating and Physical Activity: An Ethnographic Assessment of the Gurabo Municipality" will also be conducted. This municipality was selected because it had the highest prevalence of children with BMIs above the 85th percentila for age and sex. This study should help us define the social, cultural, economic and ethnographic factors that contribute to the elevated overweight rate. By identifying them we will be able to redirect and refocus the Alliance strategic plan.

The culturally adapted PR Food Pyramid for the pediatric population should be ready for dissemination. Once it is made public our staff will become actively involved in its dissemination and will promote compliance with its recommendations. Our staff will continue to promote physical activity, breastfeeding and healthy nutrition during their home visits and community based activities as strategies that prevent childhood obesity.

The Alliance will continue to meet and to implement the strategic plan. The MCH Division will monitor the activities that are relevant to the pediatric population. The public policy developed by the Alliance will be submitted to the Governor for his consideration and approval. The Alliance will continue to partner with other key stakeholders to disseminate messages regarding the need to increase physical activity and healthy eating habits.

The Transformers Club activities will continue in collaboration with the Department of Education After School Program.

Our MCH Division staff will provide WIC with TA that will allow them to analyze the data and evaluate their project's ability to stop or reduce the weight gain in a group of 3-4 year old overweight participants whose parents participated in a series of lectures and who were provided a series of opportunities to exercise. Children participating in the project will be weighed and measured 6 months after completing the program in order to measure its long term impact.

Performance Measure 15: *Percentage of women who smoke in the last three months of pregnancy.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective				2.7	2.6
Annual Indicator			2.0	1.6	1.5
Numerator			20	31	22
Denominator			1004	1904	1426
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	1.4	1.4	1.4	1.4	1.4

Notes - 2007
Data obtained from the 2008 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Division of the PR Department of Health.

Notes - 2006
Data obtained from the 2006 ESMIPR Survey (PRAMS like adapted version), which is conducted by the MCH Division of the PR Department of Health. Data reported last year, corresponds to ESMIPR 2004 Survey.

Notes - 2005
Preliminary data obtained by the ESMIPR Survey (PRAMS like adapted version) for 2005 conducted by the MCH Division of the PR Department of Health.

a. Last Year's Accomplishments
The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out biennially by the MCH Division. In the 2006 survey, 1,904 women were interviewed in the immediate post partum period. The prevalence of tobacco use among pregnant women was calculated at 2.7%. Of the women who reported smoking at any point during pregnancy, 70.5% (31 women) continued to do so in the last trimester of pregnancy, distributed as follows: 19 (43.2%) smoked fewer than 10 cigarettes per day, 10 women (22.7%) smoked 10-20 cigarettes per day, and 2 (4.5%) smoked more than 20 cigarettes per day. The difference between the smoking prevalence reported in the 2004 and 2006 ESMIPR is not statistically significant.

Of 589 pregnant HVP participants screened in 2007, 41 (6.96%) reported smoking during pregnancy. Of these, 38 (92.7%) stopped smoking or significantly reduced their use of tobacco, and 3 (7.3%) participants continued smoking at the same rate. Two participants reported they had stopped smoking before the current pregnancy.

In the 2005 birth certificate, the question regarding cigarette use during pregnancy was reformulated to include number of cigarettes smoked in the three months before pregnancy and in each trimester. For 2007, preliminary data show 0.07% tobacco use in the 3 months before pregnancy, 0.04% in the first trimester, 0.02% during the second, and 0.04% in the third trimester. These numbers contrast sharply with other data sources. The 2007 BRFSS revealed that 7.8% of all women smoked every day or some days (pregnancy status was not ascertained).

The HVNs continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2006-07, a total of 378 educational activities on ETS and smoking prevention were carried out, reaching 5,150 participants.

The "Comenzando Bien" prenatal education curriculum, developed by March of Dimes, is offered to pregnant women throughout the island by specially trained and certified facilitators. One of the topics covered in this program is use of tobacco in pregnancy. In 2007, 15 sessions of the "Comenzando Bien" program reached 218 participants, including pregnant women and their partners or other support person.

In December 2004, the Department of Health established an island-wide, toll-free smoking quit line. In 2006, the quit line assisted 1,120 smokers; 52.5% were women, whereas 71.7% of all callers were 16-51 years of age. The quit rate for the help line is approximately 34.6% over the 3 years it has been in existence.

On March 2, 2007, changes to Law #40, the Law to Regulate Smoking in Public and Private Places, took effect. This comprehensive law prohibits smoking in all workplaces, businesses,

private and public spaces.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Share information of the ESMIPR survey with concerned individuals.				X
2. Screen HVP participants for tobacco use and provide management according to the level of risk.	X			
3. Update providers' knowledge regarding screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	
5. Disseminate educational materials on adverse effects of high risk behaviors during pregnancy.			X	
6. Increase public awareness of poor birth outcomes associated with risky behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

b. Current Activities

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in the "Comenzando Bien" Prenatal Curriculum. The "No Smoking Day" march in Arecibo had over 350 participants, including general public, pregnant women and children.

Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees. This major step in the continuing efforts to decrease smoking will take effect in July 2008.

The Administration for Children and Families (ADFAN) of the PR Department of the Family has established a HVP. It uses the same model and instruments as the PRDH's HVP. Healthy Start staff trained their HVP nurses on MCH topics, including the tobacco use screen and the Smoking Cessation guide.

According to the 2008 ESMIPR, 2.6% (37) of 1,426 respondents smoked at some point during pregnancy and 1.5% (22) continued to do so in the last trimester.

The interagency Tobacco Coalition continues smoking cessation promotion activities, including the Tobacco Summit. Over 350 health professionals attended the two-day Summit. In 2007, the quit line assisted 1,167 smokers (66.6% were women and 69.3% were 16-51 years old). This May the PRDH Tobacco Program will sponsor a "Quit and Win Challenge". Those who remain smoke free at the end of the month are eligible to win prizes. It also holds smoking cessation clinics for employees.

c. Plan for the Coming Year

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse. CHWs will include the topics

of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses the MCH staff offer in their respective municipalities, including the "Comenzando Bien" prenatal curriculum and other educational activities. The MCH staff will continue the collaborative efforts with the Tobacco Coalition.

The implementation of the stringent regulations of Law #40 should have a positive effect in decreasing the number of pregnant women and children exposed to environmental tobacco smoke. In addition, Law #21 will make it easier for smokers who wish to quit to obtain medical assistance for their efforts.

The SIMESSI section of the MCH Division is undertaking an evaluation of the impact of the implementation of the revised 2005 Birth Certificate on data availability and accuracy. One of the areas that will be closely monitored are the smoking related questions and comparing them to other smoking data sources such as ESMIPR, and the BRFSS. We expect to complete the study during the 2008-2009 BY.

Performance Measure 16: *The rate (per 100,000) of suicide deaths among youths aged 15 through 19.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	3.5	3	2.5	1.5	1
Annual Indicator	4.6	2.7	2.0	2.4	1.0
Numerator	14	8	6	7	3
Denominator	301435	299286	297283	296387	296121
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					Yes
Is the Data Provisional or Final?				Provisional	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	1	1	1	1	1

Notes - 2007
Updated data for 2007, number of events is less than 5 cases. For source of information refer to 2006 notes.

Notes - 2006
Numerator: Office of Informatics and Technology Advances (OITA) of the Department of Health. Data for 2006 is preliminary.
Denominator: Population estimates of the US Census for 2006.

Notes - 2005
Numerator: Office of Informatics and Technology Advances (OITA) of the Department of Health as of September 2005.
Denominator: Population estimates of the US Census.

a. Last Year's Accomplishments

Between 2003 and 2006 the suicide rate among teens aged 15-19 dropped from 4.6 to 1.3 per 100,000 suicide deaths. The PR Poison Control Center (PCC) reported 13 deaths associated with exposure to toxic agents; how ever, none of them were less than 21 years of age. In 2007, 1,428 out of the 7,843 (18%) calls to the PCC were related to suicide attempts in adolescents. Most occurred in females and were associated with problems with their relationships with their peers and family members.

During FY 2006-2007, the MCH staff held 82 educational activities and workshops on the signs and symptoms associated with suicide as well as prevention of adolescent suicide in the eight health regions. A total of 1,717 persons participated in the activities. The MCH staff also held 232 educational activities on adolescent self-esteem. A total of 4,632 persons participated in the activities.

A Committee for the Integration of Positive Youth Development Training Modules was organized within the "Reto y Esperanza: Healthy Puerto Rican Youth Project". The Committee is composed of seven adult and youth members. The Committee reviewed each of the six training modules that had been developed to make the necessary changes. The review performed by the Committee was based on open discussion and consensus among members regarding the changes introduced to the modules. The Committee met six times to review the training modules and developed several drafts of each module before finalizing them. Four training modules were finalized and sent to the project's partners in Region Two -LEAH and ACT for Youth- for evaluation.

The Commission for Suicide Prevention (CSP) of the PRDoH, composed of representatives of state agencies and non-profit non-government organizations, distributed "Para Salvar Vidas" (To Save Lives) toolkits targeted at the adult and adolescent population. The kit contains information on crisis intervention services, signs and behaviors associated with suicide in adolescents and adults, and ways to handle these situations. During FY 2006-2007, the Commission distributed 75,410 information materials that included "To Save Lives" kits, posters and pocket cards. Title V staff distributed 1,200 suicide prevention materials (pocket cards and posters) in the 8 health regions.

During the reporting period, the Puerto Rico Commission for Suicide Prevention (PRCSP) conducted 96 adolescent suicide prevention activities. Over 1,000 persons participated in the activities. The Commission also held 24 suicide prevention workshops and presentations directed to social, legal and health professionals, reaching 1,028 persons.

The PRCSP sponsored the 5th National Suicide Conference held in August 2006, attended by 400 participants. The PRCSP participated in media communication programs: 45 radio programs and 11 television programs. It also held 16 press interviews published in the four most important newspapers in Puerto Rico. In addition, the PRCSP published a Supplement to Prevent Suicide during Christmas in one of the leading newspapers on the Island, with 1,900,000 readers.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Continue analyzing available VS and other data sources on suicide prevalence by geographical areas.				X
2. Contract the Naranjito Youth Program, Inc. to conduct a community-based Positive Youth Development pilot project in the municipality.				X
3. Increase teens' and parents' awareness of the signs and symptoms associated with suicidal ideation and intent by			X	

distributing educational material and providing group orientations at the community level.				
4. Implement the revised “Abracemos La Vida” (Let's Embrace Life) module in the school-based Promotores de Salud (Youth Health Promoters) project.			X	
5. Develop and implement a train-the-trainer manual on Positive Youth Development.				X
6. Train 12 persons -adults and youths- as promoters of the Positive Youth Development Model.				X
7. Coordinate and monitor 18 training sessions, that trained Positive Youth Development Promoters will be offering on PYD Model.			X	
8. Distribute the “To Save Lives” kits developed by the Commission for Suicide Prevention and promote the use of the Poison Control Center and the ASSMCA Mental Health hotlines.			X	
9. Continue promoting Positive Youth Development as a major primary prevention strategy to reduce suicidal behavior and promote adolescents health and wellbeing.			X	
10. Continue providing educational activities by MCH Community Health Workers on the prevention of suicide among adolescents.			X	

b. Current Activities

The ACT for Youth in New York and LEAH at Rochester University are currently evaluating the training modules completed by The Committee for the Integration of Training Modules of the "Reto y Esperanza: Healthy Puerto Rican Youth" project. The Committee is currently in the process of finalizing the review of the remaining two modules. The MCH Division is also promoting PYD throughout the eight health regions, as the main strategy to adopt healthy lifestyles and prevent suicidal behavior. The MCH Division has contracted the Naranjito Youth Program, Inc., a community-based organization, to establish a pilot PYD project in the municipality of Naranjito to promote healthy lifestyles among youths in community context.

The PRCSP offered 12 MCH, SISA and Healthy Start programs staff a lecture on how to identify signals of suicidal behavior in the adolescent population and offered general guidelines on how to intervene in these situations. They have also provided a follow-up training to ten SISA program staff to enable them to identify the level of risk for suicide youth are showing and appropriate intervention techniques according to the risk level. The MCH staff at the regional level continues to hold activities related to suicide prevention. As of today, 18 activities on self-esteem have been offered to a total of 501 adolescents.

The PYD project was formally presented to the Secretary of Health and a group of 40 of her closest advisors on April 25, 2008.

c. Plan for the Coming Year

The MCH Comprehensive Youth Health Services (SISA) program will implement the following plan to address the prevention of teen suicidal behavior and the promotion of healthy lifestyles among youth. The plan involves the following major activities:

1) The Naranjito Youth Program, Inc. under the sponsorship of Title V, will implement a Positive Youth Development community-based pilot project in Naranjito, a rural municipality. The pilot project involves training promoters in PYD -both youth and adults- who will in turn promote positive youth development in different agencies, organizations and communities in Naranjito. The SISA program staff will monitor and provide technical assistance to the project.

2) The SISA program will hold press conferences and presentations to disseminate information on and promote the adoption of the Positive Youth Development as an important strategy for the prevention of high-risk behaviors and the promotion of the health and wellbeing of the adolescent population.

3) The "Reto y Esperanza" Positive Youth Development project will integrate the six training modules into a PYD guide and a train-the-trainer manual for PR. Twelve persons -six adults and six youth representing different organizations- will be trained as PYD Promoters. These PYD promoters will promote the Positive Youth Development model by offering trainings in the eight health regions. Each adult PYD promoter will offer two trainings while youth PYD promoters will offer one training session each, for a total of 18 trainings. SISA program staff will provide follow up after the trainings and monitor the PYD promoters progress.

5) The SISA Program staff will revise the "Abracemos la Vida" (Let's Embrace Life) module to develop specific tools to help teens face anger, anxiety, loss and sadness and other situations that may contribute to suicidal behavior.

In addition to the SISA plan, the MCH staff will continue offering presentations on topics related to adolescent suicide prevention. MCH staff will also promote the utilization of PCC and ASSMCA Mental Health Support Line PAS toll free hotlines. The PRCSP will hold the annual conference on Suicide Prevention during the month of August 2008. The Commission and the MCH staff will distribute the "To Save Lives" kit and other informational packets on adolescent suicide prevention throughout the eight health regions. The Commission will also continue offering workshops on teen suicide prevention.

Performance Measure 17: *Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	78	79	55	45	47
Annual Indicator	41.8	45.5	42.3	44.6	41.7
Numerator	299	340	311	325	227
Denominator	716	747	736	729	545
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	49	51	53	55	57

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
A panel of experts in neonatology of the Pediatric University Hospital provided a list of Level II and Level III NICUS available in the Island. A Revisor Committee was established to provide a

more precise data of the levels of perinatal care in PR.

Data for 2005 provided by the Office of Informatics and Technology Advances (OIAT) of the Department of Health. Data of 2006 is preliminary.

Notes - 2005
A panel of experts in neonatology of the Pediatric University Hospital provided a list of Level II and Level III NICUS available in the Island. Only four (4) level III NICUS were identified and are located at:
1) Pediatric University Hospital (PR Medical Center), 2) Municipality Hospital of San Juan (also located at the PR Medical Center - San Juan), 3) Hospital Auxilio Mutuo (San Juan), and Hospital Interamericano de Medicina Avanzada (Caguas).

Preliminary birth data for 2005 provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

a. Last Year's Accomplishments
During this decade, the percentage of VLBW infants delivered in facilities prepared to manage high risk deliveries and neonates has decreased almost 50% (82.2% in 2000 to 41.7% in 2007). One possible explanation for this decrease is the lack of a formal classification of these perinatal facilities and the constant change in the services they provide to newborns.

For the last few years this PM was calculated using as reference a list of Level III NICUS available in the Island provided by a panel of experts in neonatology from the Pediatric University Hospital. Because of the need to be able to identify accurately where VLBW deliveries are occuring in Puerto Rico, the MCH Program established a Perinatal Care Guidelines Review Committee in 2007. Their goal was to classify hospitals that provide perinatal services in PR. The committee had 22 members. Among them were neonatologists, pediatricians, obstetricians, nurses, transport personnel and MCH staff. During the first meeting all neonatologists agreed that many of the VLBW infants may indeed be occurring in facilities that were prepared to deal with these high-risk deliveries but were not classified as such. With this in mind, the Perinatal Care Guidelines were adapted according our current situation during the next six meetings. In order to classify the hospitals according to the services they were able to provide, committee members designed a questionnaire using the newly revised Perinatal Guidelines. A total of 42 hospitals around the Island that have more than 100 deliveries per year were selected to have their classification reviewed. The Pediatric University Hospital in the PR Medical Center was included in the group because, even though it does not provide delivery services, it is contiguous to University Hospital (which provides delivery services for high risk pregnant women) and accepts transfers of VLBW infants. During November 2007 perinatal nurses of the MCH Program were trained to administer the questionnaire in the selected facilities.

A survival analysis of very low birth weight infants during 2001 to 2003 was completed to assess the impact perinatal services had on the survival of these infants. The result of the hazard ratio revealed that there was an excess mortality risk, if the VLBW infant was born in a facility that was not prepared to manage high risk deliveries and neonates; however, this was not statistically significant (ARadjusted=1.03; 95% CI: 0.88-1.19).

HVNs routinely assess their clients for risks of premature delivery. They provide appropriate education / counseling regarding the signs and symptoms associated with premature labor and provide them information regarding the closest birthing facility with Level III perinatal services. During last year, HVNs visited 6,214 families and identified their OB needs.

The "Comenzando Bien" prenatal educational curriculum, developed by March of Dimes, is offered to pregnant women throughout the island by specially trained and certified facilitators. It includes information on the signs and symptoms of a premature delivery. In 2006-07, 20 sessions of the "Comenzando Bien" program reached 230 participants, including pregnant women and

their significant others.

The MCH Community Health Workers distributed educational material and offered 90 group activities on the subject of signs and symptoms of premature labor to 1,007 participants across the Island during FY 2006-2007. Likewise, 14 group orientations regarding where to seek emergency assistance in case premature labor ensues were offered. A total of 135 persons participated in them.

Table 4a, National Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Educate pregnant women on the risk of preterm delivery and where to go in case of an emergency.			X	
2. Disseminate educational materials explaining signs and symptoms of PTB.			X	
3. Analyze place of birth and outcome of all VLBW infants born in 2007.				X
4. Disseminate findings of activity #3 among obstetricians and neonatologists.				X
5. Promote the use of a prenatal card with pertinent information to be carried at all times by pregnant women.				X
6. Collaborate with the PR MOD Prematurity Taskforce by facilitating focus groups with women who have recently experienced a premature birth in order to identify additional factors that might explain our elevated PTD rate in PR.				X
7. Classify hospital facilities by levels of perinatal care, according to the adapted Perinatal Care Guidelines (5th edition).				X
8. Once hospitals are classified, promote their organization according to level of care as a coordinated perinatal system of care network.				X
9.				
10.				

b. Current Activities

The MCH Program is part of the PR March of Dimes Chapter Prematurity Taskforce (PRPT) which analyzed PR VS data from 1990 to 2004 to identify major prematurity risk factors that could explain our very high prematurity rate. The PRPT was surprised to find that the usual suspects (type of delivery, PNC and maternal age, education, life styles) could not explain the increasing trend. Results are being presented in the Surgeons General's Conference on the Prevention of Preterm Birth in Bethesda, Maryland and in the 2008 Pediatric Academic Societies Annual Meeting in Hawaii.

In January 2008 the MCH perinatal nurses began interviewing the staff of the birthing hospitals selected for classification using the instrument designed last year by the Perinatal Care Guidelines Review Committee. We expect to have the completed questionnaires ready for analysis this summer.

Home Visiting Nurses and CHWs continue to educate pregnant women on the signs and symptoms of preterm delivery and providing them with information regarding the Level III facilities closest to them. They served 1,173 pregnant women in 2007.

The MCH Division is promoting the availability and use of the PNC Card and among ER physicians. The purpose of the PNC Card is to ensure that the pregnant women have with them

at all times information regarding their PNC and will be able to provide this information to ER providers during an OB emergency.

c. Plan for the Coming Year

The hospital facilities in Puerto Rico will be classified as basic care (Level I), specialty care (Level II), subspecialty care (Level III), and supratertiary care, according to the adapted Guidelines for Perinatal Care. Once hospitals are classified into these categories, a descriptive analysis will be repeated in order to identify the outcome newborns have depending on their place of birth. The findings of this study will be shared with perinatal providers and executive directors of birthing facilities across the Island. Once the study concludes, we expect birthing hospitals will be able to coordinate among themselves and establish a regional referral network based on their assigned level of care. This will allow them to provide services in the appropriate facilities to pregnant women, based on their level of risk for a poor pregnancy outcome.

The MCH Division will continue to participate in the Puerto Rico Prematurity Taskforce (PRPT) organized by the PR Chapter of March of Dimes with the objective of identifying specific causes that might explain the increase in premature births. In conjunction with them, we are planning to facilitate several focus groups with women who have recently experienced a premature birth in order to identify additional factors that might explain our elevated PTD rate in PR.

The MCH staff and HVNs will continue to educate pregnant women to recognize the early signs and symptoms of premature delivery. In addition, we will stress the importance of knowing where the closest Level III facilities are located so they will know where to go for an obstetrical evaluation in case premature labor signs and symptoms appear. In addition, educational materials and information concerning signs and symptoms premature labor will be disseminated to pregnant women. MOD will continue its aggressive prematurity awareness campaign in the media.

The March of Dimes "Comenzando Bien" prenatal courses will also continue on a regular basis. The signs and symptoms of a premature labor will be addressed during the sessions.

Performance Measure 18: *Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	84	85	86	87	88
Annual Indicator	82.1	83.2	71.6	82.0	82.0
Numerator	41728	42594	36285	39199	30029
Denominator	50803	51223	50687	47806	36611
Check this box if you cannot report the numerator because 1.There are fewer than 5 events over the last year, and 2.The average number of events over the last 3 years is fewer than 5 and therefore a 3-year moving average cannot be applied.					
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	89	90	91	92	93

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Numerator and Denominator: Preliminary data provided by the Office on Informatics and Technology Advances (OITA) of the Department of Health.

Beginning in 2005, changes were introduced to the birth certificate. The earlier version of the birth certificate asked the woman the month of pregnancy when she started prenatal care, while the new version asks her the date when she began prenatal care.

In 2006, 11.2% (3470) of the women who delivered did not answer the question and were regarded as missing values for this field in the birth certificate. The reported number reflects the proportion of women who provided an answer for the question.

Notes - 2005
Data for 2005 is final. As a result of the change in the birth certificate, the way this information is asked of the woman changed. The previous version of the Birth Certificate asked the month of pregnancy when she began prenatal care. The new version asks the woman the date when she began prenatal care.

Over 3,000 women did not answer the question and were treated as missing values for this variable in particular. The reported number reflects the proportion of women who provided an answer for the question.

a. Last Year's Accomplishments
Prenatal care provides an opportunity to promote the health and well being of the pregnant woman, her offspring and her family. Early PNC is regarded as one of the most cost-effective strategies available in public health.

According to the 2006 Vital Statistics, 99.8% of the mothers who had a live birth received PNC. Among them, 65.1% were insured by the GIP; 33.6% had private insurance; and 1.3% had no health insurance. Nevertheless, having a health plan did not assure them early admission into PNC.

VS data for 2006 revealed 82% of live births in PR occurred in women who entered PNC during the 1st trimester. After a drop in the rate in 2005 to a low of 71.6%, the rate has returned to previously observed levels. Among possible reasons for the unexpected drop in the early PNC rate observed after the implementation of the revised 2005 birth certificate are: changes in the way it is calculated, inaccurate responses provided by the pregnant women and the increase in missing values for this field. Among postpartum women who answered the 2006 PRAMS-like study (ESMIPR, Spanish acronym) questionnaire, 92% reported they initiated their PNC in the 1st trimester, 7.6% during the 2nd or 3rd trimester, and 0.4% reported no PNC.

The MCH Division analyzed 2006 VS data and was able to detect disparities in the early PNC rate based on age. Results revealed women 20 years or older had higher rates (82.9%) than adolescents. Adolescents ages 18 and 19 had rates of 71.4%, while those in the 15-17 age group had a rate of 67.3%; and the 10-14 age group had the lowest rate, 52.9%.

In 2005, the MCH Division carried out a study to identify factors that contributed to women entering PNC late or not seeking care at all. Information was gathered using a self-administered survey that was completed by women who had no PNC or had initiated care after 13 weeks of gestation. Participants were recruited in postpartum wards and Registrar's Offices. Among respondents, 96.6% had initiated PNC after their 1st trimester of gestation and 3.4% had had no PNC. Most were single, low-income, unemployed and GIP participants. The main barriers identified were either personal or related to the health care system. Reasons offered were, in

descending order: being unaware they were pregnant (64.7%); lack of health insurance at time of conception (21.1%); and fear of informing parents about the pregnancy (15.8%). Among women participating in the study, 41.5% reported waiting for the appointment for more than a week after requesting the service.

Based on the analysis of the available data and input from CHW and HVN we identified that adolescents were facing difficulties when trying to comply with the requirement of documenting a pregnancy with a positive serology test in order to qualify for the GIP and start PNC. This was thought to be contributing significantly to their lower rate of early PNC. In response to this finding a protocol was developed to help adolescents suspecting a pregnancy get the blood test and subsequently the GIP card if the test was positive. Once they had the GIP card they would be assisted in the process of initiating PNC in the first trimester. Several meetings were held with ASES and the health insurance companies in order to implement the protocol.

Meanwhile we continued our efforts to achieve our 2010 HP goal that at least 86% of pregnant women in PR are admitted to PNC in their 1st trimester. CHW worked identifying pregnant women without PNC and making sure they received the obstetrical care they needed as soon as possible. During this period, they provided 133 group orientations and distributed educational material about the importance of early admission into PNC to 1,636 persons.

Likewise, during CY 2007, 5,217 interconceptional participants of the HV Program received individual orientation by HV nurses on the early signs and symptoms of pregnancy and the importance of enrolling into PNC services early.

Table 4a, National Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Continue to increase public awareness regarding the importance of early and regular prenatal care.			X	
2. Provide health insurance coverage for pregnant women with incomes 200% below the State Poverty Level that includes free early and comprehensive prenatal care.	X			
3. Carry out outreach activities to identify pregnant women with no prenatal care and assist them in the process of enrolling into prenatal care services.		X		
4. Encourage preconceptional care during HVN interventions with participating families and at the community level.	X			
5. Share information obtained from studies performed by MCH staff, such as 2008 ESMIPR and Late PNC study, with key partners to make them aware of the importance of promoting early prenatal care.				X
6. Disseminate among health providers and other stakeholders the public policy that requires pregnant women are admitted into PNC as soon they request it.				X
7. Train data abstractors who will collect birth record information for the study to evaluate the impact of the 2005 birth certificate revision on some VS parameters, such as prenatal care.				X
8. During the preconceptive health pilot project with postpartum diabetic women, stress the importance of beginning PNC early in case they become pregnant again.				X
9. Convene the Committee for the Promotion of Preconceptive Health at least 4 times during the year.				X
10.				

b. Current Activities
Preliminary 2007 birth certificate data reveals the early PNC rate remains at 82%. Meetings are being coordinated with key collaborators to implement the protocol developed to eliminate the access barriers adolescents face when attempting to enroll into PNC early. We are continuing our efforts to promote admission into early PNC. Our staff is always on the lookout for pregnant women without PNC. Once identified, they become our number one priority for admission into the HVP and OB care.

Pregnancy outcomes are affected by the preconceptive health of WCBA. A Committee for Promotion of Preconceptive Health was established with representatives of HIC, WIC, Diabetes Program, BD Surveillance System, Academia and Healthy Start Program. A pilot project that will target postpartum diabetic women is being developed. They will receive a series of educational interventions in the areas of diabetes control, nutrition, physical activity and women's health. The goal is to make them aware of the importance of controlling their diabetes during the preconceptional period in order to improve the outcomes of future pregnancies.

The new Civil Code increases to 16 the age for consenting to have sex. The need to report pregnant teens under 16 to the authorities have made some refuse our services to help them get into PNC early.

CHW and HVN continue to stress the importance of beginning PNC before reaching 12 weeks of gestation during their community level and home visiting interventions.

c. Plan for the Coming Year
Since pregnant adolescents have the lowest early PNC rates, identifying and assisting them in enrolling in PNC early will become our main priority area. We will hold meetings with ASES, HIC, and School Officials in order to have the protocol fully implemented. This will require that HCI companies identify a special code for the serology test to confirm the pregnancy. Once a positive test is obtained, MCH staff will assist pregnant teens get enrolled in PNC during the first trimester.

The MCH staff will continue to provide educational activities at the community level in order to increase the general population's knowledge of the importance of beginning PNC early. Special emphasis will be given to disseminating information about the early signs and symptoms of pregnancy and the need to request prenatal health care as soon as pregnancy is suspected. These two messages have been selected based on the findings of the survey conducted by the MCH Division in 2005, which identified the main reason for entering PNC late was being unaware of the pregnancy. We will continue to stress the importance of initiating PNC as soon as possible among those who are already pregnant but have not attended their first prenatal visit.

The preconceptive health project will begin in two WIC clinics on the western side of the Island. A total of 4 educational interventions are being planned. They should conclude next summer. Once the project is fully evaluated the Committee will determine if it should be modified and/or expanded to other areas. Funds provided by the Office of Women's Health will be used to train PCP's and RN in the Heart Truth curriculum, which urges health professionals to talk to women about heart disease, assess their risk, and motivate them to take action to reduce their risk.

The State Systems Development Initiative (SSDI) will train the data abstractors who will collect hospital birth record information for the study to evaluate the impact of the 2005 birth certificate revision on some VS parameters, such as prenatal care. Once the study is concluded, we will be able to evaluate if the changes in PNC rates are real.

Our MCH staff will continue sharing important information regarding MCH issues, such as the 2008 ESMIPR results and the study about late entry into prenatal care, with prenatal health care providers and other key stakeholders. We expect this increase awareness of their responsibility to

educate their clients on the early signs and symptoms of pregnancy and to expedite women's entry into PNC.

The MCH Division will continue promoting compliance with the public policy that states all pregnant women should be admitted into PNC as soon as they suspect they are pregnant and request the service.

D. State Performance Measures

State Performance Measure 1: *The number of HIV positive pregnant women treated with AZT.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	100	100	100	100	100
Annual Indicator	95.7	82.5	93.2	94.0	98.7
Numerator	67	66	69	78	76
Denominator	70	80	74	83	77
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	100	100	100	100	100

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Data provided by the Pediatric HIV/AIDS program for CY 2006.

Notes - 2005
Data provided by the Pediatric HIV/AIDS program.

a. Last Year's Accomplishments
In CY 2006, the Health Insurance Administration (ASES, Spanish acronym) reported 23,747 (82%) pregnant women receiving services under GIP (29,119) were tested for HIV; 83 of these women were HIV positive. Only 78 HIV-positive women delivered a live infant, three had abortions and two were lost to follow up. Of the 83 HIV positive women, 78 (94%) received antiretroviral treatment. Only one of the infants delivered was confirmed to be HIV positive.

Providing services to HIV positive pregnant women has always been considered a priority for the PR Department of Health. In 1994 the DoH established a public policy that stated HIV-positive pregnant women should be given the opportunity to receive AZT in order to prevent perinatal HIV transmission. At that time testing and AZT were administered on a voluntary basis. In addition, Perinatal HIV Treatment and Prevention Guidelines were developed and distributed to the GIP Health Insurance Companies so they could in turn distribute them to their health care providers. These guidelines were developed to ensure HIV positive women received adequate treatment, which included new therapy options besides AZT. Compliance with the guidelines was included as a requirement in their contracts.

A reduction in the vertical HIV transmission was observed as a direct result of the 2002 pilot project implemented in the Carolina Regional Hospital. This project documented that providing rapid HIV testing to women in labor whose HIV status was unknown and treating those who turn out to be positive reduced the number of infants that were HIV infected. During CY 2006, five

women treated in their delivery room and who had no evidence of their HIV status were tested. None turned out to be positive.

The MCH Division and the Perinatal HIV/AIDS Prevention Program (PHAPP) both recognize the need to continue increasing the awareness level among all pregnant women that to reduce perinatal HIV transmission, it is essential for them to know their HIV status and receive adequate treatment, if it is positive. During FY 2006-2007, CHW provided educational activities on the topic to 94 groups and reached 1,821 persons throughout the Island. In addition during 2006, MCH nurses provided individual education on HIV/AIDS prevention to 6,593 prenatal / interconceptional women participating in the HVP. Material on perinatal HIV/AIDS prevention was distributed among the participants. During CY 2006, the Perinatal HIV/AIDS Prevention Program offered 10 training sessions to health professionals islandwide, emphasizing the importance of preventing perinatal transmission of HIV/AIDS, the rapid HIV testing, and the adequate treatment and follow up of HIV positive pregnant women. A total of 224 health care providers took part in these activities. HIV/AIDS prevention is frequently addressed at educational forums at the community level. The seven Regional Immunology Clinics and the UPR Medical School staff have also been providing their expertise and services in the prevention and treatment efforts to reduce vertical HIV transmission.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Disseminate information regarding the importance of being tested and knowing their HIV status among HVP participants, particularly among those who are pregnant.	X			
2. Provide continued medical education to health providers on established guidelines that require universal prenatal HIV screening and follow up for those being tested.				X
3. Continue providing pre-counseling, screening and treatment to HIV positive pregnant women on a voluntary basis.	X			
4. Disseminate information regarding the recently signed public policy that requires all birthing hospitals to perform the rapid HIV test on all women in the delivery room who have no evidence of their HIV status.				X
5. Share results of data related to perinatal HIV screening and treatment with key health providers.				X
6. Distribute educational material on the topic of perinatal HIV transmission prevention at the community level.			X	
7. Continue collaborating with the Perinatal HIV/AIDS Prevention Program in their efforts to monitor compliance with perinatal health care guidelines that require health providers order HIV testing during PNC for HIV negative women they serve.				X
8. Promote the use of the patient's prenatal information card to assure that all pregnant patients are screened for HIV according to the perinatal care guidelines.			X	
9.				
10.				

b. Current Activities

On February 20, 2008 the Secretary of Health held a press conference to announce the policy that requires all birthing hospitals perform the rapid HIV test to all women in their delivery rooms whose HIV status is unknown. The policy also establishes HIV positive women must be adequately evaluated, counseled and treated once they are identified. The MCH Program

participated in the initial efforts that led to its approval.

For 2007, ASES reported 26,702 pregnant women insured by the GIP were tested for HIV. Among these women, 77 tested positive. So far, 76 (99%) of them have received antiretroviral treatment for HIV. However, only 40 have completed all three phases of treatment. The rest have received partial treatment, except one woman whose pregnancy and treatment status is unknown. To date, 52 of the 77 HIV-positive women have delivered a live infant. One (1) of these infants has remained HIV positive.

During CY 2007, of the 54 pregnant women whose HIV status was unknown and who were screened in the Carolina Hospital, only one had a HIV positive result and received treatment. The PHAPP is helping major birthing hospitals implement the rapid HIV testing public policy in their delivery rooms.

HVN, CHW's and the PHAPP continue to provide prenatal and interconceptional education on perinatal HIV/AIDS prevention. The PHAPP is educating PCP on HIV counseling, approved perinatal HIV prevention treatment regimens, rapid HIV testing and compliance with the Guidelines.

c. Plan for the Coming Year

The MCH Division is fully aware of the need to identify pregnant women that are HIV positive and to provide them adequate treatment. Therefore, we will continue to collaborate with the Perinatal HIV/AIDS Prevention Program in its efforts to detect pregnant women whose HIV status is unknown.

The MCH Division will continue to disseminate and promote compliance with the recently enacted public policy that requires birthing hospitals perform a rapid HIV screening on women whose HIV status is unknown at the time of delivery. Alongside the Perinatal HIV/AIDS Prevention Program we will seek the collaboration of important stakeholders, such as the PR Chapters of ACOG and AAP, the PR College of Physicians, and health care insurance companies, to help us disseminate information regarding this public policy during their annually sponsored CME activities. During these activities we will stress the need to have all pregnant women screened for HIV in order to prevent vertical HIV transmission as stated in the current DoH Prenatal Care Guidelines. We will also provide them with available statistical data regarding perinatal HIV transmission in PR and encourage them to comply with current guidelines and the public policy.

The Perinatal HIV/AIDS Prevention Program will invite health care providers and birthing hospital staff to participate in a meeting where the protocol and the rapid HIV screening public policy will be discussed.

The MCH Division will continue to stress perinatal HIV prevention messages when we participate in educational activities at the community level and during our home visits to the HVP participants. We will also distribute available educational materials that promote universal HIV screening in pregnant women. We will help provide case management and care coordination services to HIV positive pregnant women who are enrolled in our HVP. The Perinatal HIV/AIDS Prevention Program will be invited to offer educational activities as part of the "Comenzando Bien" prenatal curriculum being offered in several Island municipalities. During their interventions they will emphasize the importance of preventing perinatal HIV/AIDS transmission and will help pregnant participants without an HIV test who get the rapid HIV test on a voluntary basis.

The Perinatal HIV/AIDS Prevention Program, the MCH Division and the administrative section of the PR Health Reform (ASES) will continue working collaboratively to monitor how health providers are complying with perinatal health care guidelines regarding HIV screening. This is essential to identify obstacles as well as outline strategies to increase the number of pregnant

women screened for HIV and to provide proper treatment and follow up to those with HIV positive results. We will promote that all pregnant women carry a prenatal card that includes essential personal prenatal care information, such as HIV test results.

State Performance Measure 2: *Establish a Home Visiting program in at least 90% of the Island by the year 2,010.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective	95	95	95	95	95
Annual Indicator	85.9	94.9	94.9	93.6	89.7
Numerator	67	74	74	73	70
Denominator	78	78	78	78	78
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	95	95	95	95	95

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Reported data as of December 31, 2006, MCH Division of the PR Department of Health.

This measure will be changed next year to a more specific one.

Notes - 2005
Reported data as of December 31, 2005. MCH Division of the PR Department of Health.

a. Last Year's Accomplishments
The core service program of the Puerto Rico Title V program is the Home Visiting Program. Its target population consists of pregnant women, interconceptional participants (up to 24 months after birth) and children up to age 2 with complex health and social problems. By the end of 2007, 93 Home Visiting Nurses (HVNs) were providing services in 70 municipalities (89.7% coverage) and 72 Community Health Workers (CHWs) in 63 municipalities (80.7%). Several HVNs have left in recent years due to retirement, sick leave, transfers to other positions or resignations. We are in the process of identifying and recruiting personnel to fill existing vacancies as the budget, administrative considerations and other factors allow.

Filling the vacant HVN positions has proven to be difficult due to financial constraints. Title V funds have been cut back, and the future is uncertain regarding increases in funding. A law recently implemented in PR granted all nurses in the public and private sectors a salary increase. In addition, the PRDOH commissioned a personnel classification study to bring the existing human resources job descriptions and salary scales up to date. The new pay scales went into effect in July 2007. It had a major economic impact on the Title V budget line for salaries and benefits. We estimate it will increase the budget devoted to HVN salaries by approximately $1 million. Despite these efforts have been made to maintain current staffing levels in order to comply with this PM and to ensure that our mothers, children and families receive the support, education and care coordination services they require.

Through the HVP interventions, emphasis is given to increasing the use of preventive services, early admission to prenatal care, regular pediatric and women's health visits to primary providers, and adequate immunizations; screening for behavioral risk factors and maternal depression; managing women who are at risk through educational interventions or referrals to treatment

services available in the community; and promoting an interconceptional period of at least 24 months after birth.

In 2007, 6,390 families received home visiting services. The CHWs identified 5,673 pregnant women and children in the community who were not connected with the existing system of care. They were given the necessary referrals to prenatal care, WIC and other services. Some were admitted to the HVP, according to their need, risk factors and the caseload of the HVN. If not admitted, the CHW's intervention ensured that the woman or child would receive needed medical, social and other support services. The CHWs maintain an extensive directory of community resources, which they share with the HVNs to facilitate the referral and care coordination efforts. In FY 2006-07 the HVNs and CHWs reached 242,760 persons in the community through 18,376 group orientations on topics related to maternal and child health.

A multi-tiered service system was developed to stratify HVP participants into Low, Moderate or Severe categories, according to an analysis of the risk factors present. The category determines the frequency and intensity of the home visits and other services. The new system will enable HVNs to serve a greater number of higher-risk families. The caseload of each HVN will range from 50-60 families, depending on the risk level. In addition, in the new stratification model the CHWs will follow up Low and Moderate risk families during their second interconceptional year, which also frees up some of the HVN's time to increase the number of pregnant participants.

CHWs continued carrying out outreach activities to identify pregnant women and children not connected to the health care system and refer them to the HVP or to services available in the community, according to their needs and the capacity of the local HVN to admit new cases.

HVN and CHW assisted HVP participants in organizing Participants' Committees (PCs) at the local (municipal) level. These groups are composed of HVP participants, their partners or other support persons and community representatives who are interested in the health and well being of the maternal and child population. The purpose of these committees is to empower participants to solve their common problems and needs with the collaboration of public and private agencies and organizations. Each PC met regularly to establish a work plan to look for solutions to the situations they identified as priorities.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Continue offering home visiting services for at-risk pregnant and parenting women.		X		
2. Offer continuing education activities for HVNs and CHWs to enhance their professional capacity.				X
3. Develop a multi-tiered risk factor assessment system for women and children 12-24 months after birth.				X
4. Fully implement the case assignment system for HVNs to reflect the risk level of participants.				X
5. Train HVNs to screen for developmental delays in infants and toddlers.				X
6. Continue HVP data collection, analysis and evaluation activities.				X
7. Establish HVP Participants' Committees.				X
8. Collaborate with the Department of the Family in the design and implementation of a Home Visiting Program.				X
9.				
10.				

b. Current Activities
The HVNs and CHWs continue to provide Home Visiting and Outreach services as previously described. The stratification model will be fully implemented in July 2008. HVNs and CHWs received education on the Infant Adoption Initiative.

The Administration for Children and Families (ADFAN) of the PR Department of the Family has established a HVP aimed at decreasing child abuse, using our model and instruments. Healthy Start and MCH staff offered technical assistance in the development of the program and has trained their nurses on home visiting techniques, case management and MCH topics.

As of May 2008 we have 1 additional HVN (91% coverage). Although economic and administrative barriers have hindered the achievement of this PM, the partnership with ADFAN will increase the availability of services to the population in need. They have HVNs assigned to 19 municipalities, including 4 where we don't have nurses; this increases coverage to 96.1% of the island.

In order to identify system based factors that contribute to poor pregnancy outcomes in the southwest area a FIMR pilot project was established. The Planning, Case Review and Community Action Teams have been identified. Initial training has been carried out for the staff who will be doing the maternal interviews and data abstraction. Notifications of infant deaths started in March 2008 and we expect to have the first case review meeting by the third trimester of 2008.

Currently there are 24 active HVP Participant Committees.

c. Plan for the Coming Year
Depending on the availability of the human resource and funding level, vacant HVP positions will be filled. Priority will be given to those municipalities with no HVN. The collaboration with ADFAN will continue, ensuring a wider availability of support services for the population that Title V cannot serve.

The HVP will continue to provide services as described. Participants will be stratified according to risk level (Low, Moderate, Severe) depending on how many and what type of risk factors they present. The caseload of each HVN will range from 50-60 families, depending on the risk level of each. Community Health Workers will continue to carry out outreach activities to identify pregnant women and children who are not connected to the health care system, as described previously. In addition, they will take part in the HVP as described previously.

The collaboration between Title V and the PR Healthy Start Project continues to be an asset. We will maintain our efforts to identify factors associated with the higher observed IM in the South/Southwest areas of the Island and implementing strategies to improve MCH indicators in this area. The FIMR initiative will play an important part in these efforts. We expect to have our first Case Review Team meeting in the fall of 2008.

Ongoing assessment of the staff's educational needs will allow us to continue offering in-service training that is responsive to the needs and interests of the staff. This ensures the continuing quality of services offered to our population. HVNs and CHWs will receive continuing education on the following topics: asthma (identification, management, and patient education), oral health, neurodevelopmental screening, cultural competency, mental health promotion, and others as deemed necessary.

We will continue to collaborate with the Department of the Family HVP. A formal cooperative agreement should be finalized during the summer 2008. According to this agreement they will be in charge of providing services to families where there has been documented child abuse or

neglect.

The HVNs will continue to support the development of the PCs. Each PC will meet on average 6-10 times per year and establish a work plan to look for solutions to the situations they identify as group priorities. The meetings also feature educational activities on various MCH topics. Some PCs may sponsor or participate in community level health fairs and immunization clinics held by the PRDH Immunization Program.

The Rotary Club of Puerto Rico has adopted Infant Mortality as a focus area for its community activities in 2008-2009. Two representatives joined the PR Healthy Start Consortium in 2007. Through this partnership, the Rotary Club has offered to sponsor educational activities directed at our participants and the community, allow us the use of their meeting facilities, and collaborate with our efforts directed at improving infant health.

State Performance Measure 3: *Prevalence of tobacco use among pregnant women*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective	2.5	2	1.5	1.5	1.5
Annual Indicator	2.8	3.6	3.6	2.7	2.6
Numerator	18	36	36	52	37
Denominator	636	1004	1004	1904	1426
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	1.5	1.5	1.5	1.5	1.5

Notes - 2007
Data collected through the PRAMS like survey conducted in 2008, MCH Division of the Puerto Rico Department of Health.

Notes - 2006
Data collected through the PRAMS like survey conducted in 2006, MCH Division of the Puerto Rico Department of Health. Data reported last year, corresponds to ESMIPR 2004 Survey.

Notes - 2005
Data collected through the PRAMS like survey conducted in 2006. MCH Division of the Puerto Rico Department of Health.

a. Last Year's Accomplishments
The "PR Maternal and Child Health Study" (ESMIPR, Spanish acronym) is a PRAMS-like surveillance study carried out biennially by the MCH Division. In the 2006 survey, 1,904 women were interviewed in the immediate post partum period. The prevalence of tobacco use among pregnant women was calculated at 2.7%. Of the women who reported smoking at any point during pregnancy, 70.5% (31 women) continued to do so in the last trimester of pregnancy, distributed as follows: 19 (43.2%) smoked fewer than 10 cigarettes per day, 10 women (22.7%) smoked 10-20 cigarettes per day, and 2 (4.5%) smoked more than 20 cigarettes per day. The difference between the smoking prevalence reported in the 2004 and 2006 ESMIPR is not statistically significant.

Of 589 pregnant HVP participants screened in 2007, 41 (6.96%) reported smoking during pregnancy. Of these, 38 (92.7%) stopped smoking or significantly reduced their use of tobacco, and 3 (7.3%) participants continued smoking at the same rate. Two participants reported they had stopped smoking before the current pregnancy.

In the 2005 birth certificate, the question regarding cigarette use during pregnancy was reformulated to include number of cigarettes smoked in the three months before pregnancy and in each trimester. For 2007, preliminary data show 0.07% tobacco use in the 3 months before pregnancy, 0.04% in the first trimester, 0.02% during the second, and 0.04% in the third trimester. These numbers contrast sharply with other data sources. The 2007 BRFSS revealed that 7.8% of all women smoked every day or some days (pregnancy status was not ascertained). According to the 2008 ESMIPR, 2.6% (37) of 1,426 respondents smoked at some point during pregnancy and 1.5% (22) continued to do so in the last trimester.

The HVNs continue implementing the smoking cessation program that was designed in 2001 under the sponsorship of AMCHP's Tobacco-Free Futures Mini-Grant. It is based on the USPHS Guidelines for Smoking Cessation and uses DiClemente and Prochaska's Transtheoretical Model as the basis for designing the most appropriate intervention. The "Perfil de la Participante" (Participant's Profile) is the instrument designed to collect information regarding smoking status, to determine addiction severity, susceptibility to change and level of motivation and support. The information gleaned from this instrument allows the HVN to tailor the educational content and the motivational intervention. The self-help diary "Mi Gran Decisión" is used as a complement to the HVN's intervention and is meant to guide the participant through a seven-day quitting process.

In addition to this program, HVNs stress the importance of avoiding environmental tobacco smoke (ETS) for women who, although not smokers themselves, live or spend time with smokers. Orientation and education are offered to these women on an individual basis, and educational materials reinforcing the information are distributed to them.

Educational materials regarding both smoking and exposure to ETS are distributed in health fairs and other community education activities. In FY 2006-07, a total of 378 educational activities on ETS and smoking prevention were carried out, reaching 5,150 participants.

The "Comenzando Bien" prenatal education curriculum, developed by March of Dimes, is offered to pregnant women throughout the island by specially trained and certified facilitators. One of the topics covered in this program is use of tobacco in pregnancy. In 2007, 15 sessions of the "Comenzando Bien" program reached 218 participants, including pregnant women and their partners or other support person.

In December 2004, the Department of Health established an island-wide, toll-free smoking quit line. In 2006, the quit line assisted 1,120 smokers; 52.5% were women, whereas 71.7% of all callers were 16-51 years of age. The quit rate for the help line is approximately 34.6% over the 3 years it has been in existence.

On March 2, 2007, changes to Law #40, the Law to Regulate Smoking in Public and Private Places, took effect. This comprehensive law prohibits smoking in all workplaces, businesses, private and public spaces.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Share information of the ESMIPR survey with concerned individuals and stakeholders.				X
2. Screen HVP participants for tobacco use and provide management according to the level of risk.		X		
3. Increase providers' knowledge of screening and management of tobacco use during pregnancy.				X
4. Include the topics of alcohol, tobacco and illicit drug use in patient orientations.			X	

5. Disseminate educational materials on the adverse effects of high risk behaviors during pregnancy.			X	
6. Increase public awareness of poor birth outcomes associated with high risk behaviors.			X	
7. Promote the use of the Quit line among WCBA.			X	
8.				
9.				
10.				

b. Current Activities

HVNs continue to implement the smoking cessation program. Educational materials are distributed at the community level. The effects of smoking on the fetus are covered in the "Comenzando Bien" Prenatal Curriculum. The "No Smoking Day" march in Arecibo had over 350 participants, including general public, pregnant women and children.

Law #21, signed 2/29/2008, requires all health insurance companies to cover smoking cessation methods and products for their enrollees. This major step in the continuing efforts to decrease smoking will take effect in July 2008.

The Administration for Children and Families (ADFAN) of the PR Department of the Family has established a HVP. It uses the same model and instruments as the PRDH's HVP. Healthy Start staff trained their HVP nurses on MCH topics, including the tobacco use screen and the Smoking Cessation guide.

According to the 2008 ESMIPR, 2.6% (37) of 1,426 respondents smoked at some point during pregnancy and 1.5% (22) continued to do so in the last trimester.

The interagency Tobacco Coalition continues smoking cessation promotion activities, including the Tobacco Summit. Over 350 health professionals attended the two-day Summit. In 2007, the quit line assisted 1,167 smokers (66.6% were women and 69.3% were 16-51 years old). This May the PRDH Tobacco Program will sponsor a "Quit and Win Challenge". Those who remain smoke free at the end of the month are eligible to win prizes. It also holds smoking cessation clinics for employees.

c. Plan for the Coming Year

HVNs will continue to screen all Home Visiting Program participants for tobacco use and provide management according to the level of risk. HVNs will continue to pay special attention to women who quit smoking during pregnancy to avoid a postpartum relapse. CHWs will include the topics of alcohol, tobacco and drug use in educational activities and individual orientations during their interventions in the community. These topics will be covered in depth during the prenatal and parenting courses the MCH staff offer in their respective municipalities, including the "Comenzando Bien" prenatal curriculum and other educational activities. The MCH staff will continue the collaborative efforts with the Tobacco Coalition.

The implementation of the stringent regulations of Law #40 should have a positive effect in decreasing the number of pregnant women and children exposed to environmental tobacco smoke. In addition, Law #21 will make it easier for smokers who wish to quit to obtain medical assistance for their efforts.

The SIMESSI section of the MCH Division is undertaking an evaluation of the impact of the implementation of the revised 2005 Birth Certificate on data availability and accuracy. One of the areas that will be closely monitored are the smoking related questions and comparing them to other smoking data sources such as ESMIPR, and the BRFSS. We expect to complete the study during the 2008-2009 BY.

State Performance Measure 4: *The birth rate among girls 10-14 years of age*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective	2	2	1.1	1	1
Annual Indicator	1.2	1.5	1.4	1.2	0.9
Numerator	182	216	206	170	130
Denominator	149078	148916	148457	147621	146341
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	1	1	1	1	1

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Numerator: Office of Informatics and Technology Adavances (OITA) of the Department of Health. Data for 2006 is preliminary.

Notes - 2005
Numerator: Preliminary data from Office of Informatics and Technology Advances (OITA) of the Department of Health as of September 2005.
Denominator: Population estimates of girls 10-14 made by the US Census.

a. Last Year's Accomplishments
The 10 to 14 years of age birth rate decreased from 1.4 births per 1,000 in 2005 to 1.2/1,000 in 2006. The MCH Division has chosen the Positive Youth Development (PYD) model as its main strategy to promote youth health and prevent high risk behaviors such as premature and unprotected sex. During this past year the Sub Committee of the "Reto y Esperanza: Healthy Puerto Rican Youth Development" Project, the HRSA awarded CE Grant to Rochester University in collaboration with Cornell University, ACT for Youth, Konopka Institute and the PR-MCH Division, worked to develop a culturally appropriate PYD Action Guide and Train the Trainer Manual. Drafts of the six modules were reviewed. The final versions for two of the modules were completed (PYD and Health and Building Youth-Adult Partnerships).

The MCH Division Adolescent Health Program (SISA) continued the Juvenile Health Promoters Project (JHPP) in 37 public, middle schools in Puerto Rico. A total of 706 JHP' s ages 12-15 were able to reach 20,800 of their fellow students, parents and general public with their health promotion messages by organizing and holding 1,253 activities during the school year. The main focus of some of these activities was to disseminate teen pregnancy prevention messages. The JHPs Demonstration Project continued in two Juvenile Detention Centers. Fourteen male JHP and 14 females participated in project workshops and activities. In addition, the Naranjito Adolescent Program worked in collaboration with MCH to prevent teen pregnancies.

A qualitative evaluation to determine the impact of the JHP project on participating students was completed and data obtained analyzed. During the evaluation, participating youth were able to identify ways in which in the project had benefited them. Some of the ones they identified were: increased knowledge of the consequences associated with high risk behaviors (such as premature sexual activity), improvement in their leadership skills, increased self esteem, maturity, responsibility and self confidence to share health promotion messages with others.

We traditionally celebrate March as Teen Pregnancy Prevention Month in PR. Last year a group of six JHP met with the Secretary of Health. During the meeting, youngsters shared their ideas, insights and suggestions about teen pregnancy prevention in PR and the work they do as JHP. In March, 2007, a group of 561 students and Regional SISA Coordinators participated in 28 "Conversatorios" (open forum discussions). This strategy was selected to promote healthy communication between teens and adults and to help adults understand adolescents' views about teen pregnancy. The information gathered during these discussions was used to identify new strategies and initiatives to reduce teen pregnancies. The SISA Program Director offered four lectures to approximately 580 health professionals about the impact and consequences of teen births in PR.

The MCH staff offered 2,754 interventions on teen pregnancy prevention, sexuality education, self esteem, sexual development and other related themes to 43,553 participants.

The "Plain Talk/Hablando Claro" Demonstration Project completed the second year of its implementation phase. This collaborative effort with the Annie Casey Foundation, Naranjito Teen Program (NTP) and PR Title V reached a total of 136 community participants during meetings held in neighborhood homes.

According to the DoH organizational structure, the Puerto Rico Abstinence Education Program is also housed under the MCH Division and the Auxiliary Secretariat of Family Health and Integrated Systems. This program sponsors activities directed at reducing pregnancies in adolescents by promoting sexual abstinence exclusively. They work similarly to the MCH SISA program to develop teens' self-esteem, decision making strategies, leadership and character formation. A total of 237 schools in 60 towns participated in PRAEP activities. A total of 109 public and private school teachers and other adult mentors were trained on sexual abstinence education. In April 2007, a mass media campaign targeting teens, "La Otra Cara del Sexo", was launched. The Leaders for Wise Decisions initiative reached 58 students and 11 community leaders in 4 summits and follow up workshops. Three interactive workshops for parents and teens reached 535 persons.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Disseminate Positive Youth Development (PYD) by using the Action Guide and Train the Trainer curriculum developed by “Reto y Esperanza” Project.			X	
2. Support the Naranjito PYD community pilot program in order to promote positive and healthy development of teens and prevent risk behaviors.		X		
3. Coordinate educational activities in schools and communities to promote healthy behaviors and prevent teen pregnancies.			X	
4. Continue SISA’s Juvenile Health Promoters Project (JHPP) in public middle schools and the JHP pilot project in 2 Juvenile Detention Centers.			X	
5. Facilitate the development of culturally appropriate educational materials and PYD activities organized by teens to promote healthy behaviors and prevent teen pregnancies.			X	
6. Increase awareness of the consequences associated with teen pregnancies among health professionals and the general public including parents and communities.			X	
7. Support the Plain Talk pilot project developed to enhance parent-child and adult-youth effective communication about			X	

sexuality, prevent teen pregnancies and STDs. Review results of its evaluation and consider disseminating it.				
8. Collaborate with PRAEP activities directed at promoting sexual abstinence and parents' communication with their children regarding sexual abstinence to prevent teen pregnancies.			X	
9.				
10.				

b. Current Activities

The implementation of the PYD model as a teen pregnancy prevention strategy continues. A pilot project to test the culturally adapted model is being implemented in Naranjito communities. JHPP continues with 678 youths in 35 public middle schools and 18 youths in 2 Juvenile Detention Centers. A meeting of JHPP youth delegates and adult facilitators was held for the first time in May 2008 to gather ideas for future PYD activities. Island wide activities were held in March, to celebrate Teen Pregnancy Prevention Month.

A meeting with the Secretary of Education was held to discuss starting PYD Health Promotion Schools in Aug 2008. The Plain Talk project in Naranjito continued neighborhood meetings and held other teen pregnancy prevention activities during Plain Talk Teen Pregnancy Prevention Week in May.

PRAEP has offered training to teachers and community members that facilitate project initiatives in public schools and special communities. With the DOE After-School Program, PRAEP provided WAIT Training, Game Plan curriculum and PYD strategies to middle and high school students. The mass media campaign targeting teens, "La Otra Cara del Sexo" ended in Dec 2007. Its website and information phone line continue. A new mass media campaign targeting parents is in progress. Five interactive workshops for parents and teens reached 1,078 participants. Coalition development and community outreach efforts continues. Alliances with community based organizations were established.

c. Plan for the Coming Year

The PYD Action Guide developed by "Reto y Esperanza" will be used to conduct a train the trainer intervention in order to prepare 6 adult youth workers and 6 youth leaders to become PYD Promoters. They will be expected to disseminate PYD in government agencies, non government entities and community scenarios. The MCH SISA staff will also be trained as PYD Promoters in order to cover all PR health regions. The PYD Action Guide will be made accessible to public agencies and community level entities interested in implementing the model. The achievements of the community-based pilot project on PYD in Naranjito will be evaluated and a decision will be made regarding its continuation.

SISA Program's Juvenile Health Promoters Project will continue in public schools with the support of the 8 Regional SISA Coordinators. The adaptation of their curriculum guide "Jóvenes Saludables en Acción" to fit the PYD model will be completed and pilot tested. Collaboration with the PR Education Department will continue to develop the PYD Health Promotion Schools Initiative in participating JHPP Schools. SISA collaboration with programs that provide services and support for pregnant and parenting teens will continue. HVN will continue offering interconceptional services to their adolescent participants to promote they space their future pregnancies. A qualitative study to identify factors that lead 15-19 year old girls to get pregnant will start in Bayamón MCH region.

Depending on the availability of funds, PRAEP will continue to implement the activities mentioned above. The new mass media campaign that encourages parents to talk to their children about sexual abstinence will be launched. The second Leaders for Wise Decisions workshop, in collaboration with the Corporation Pro Arts in Education (COPAE), the Office of Special

Communities (OSC), and the DOE, will take place with an expected participation of 100 adolescents.

State Performance Measure 5: *The rate of cesarean section in Puerto Rico*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	42.6	40.4	38.2	36	34.8
Annual Indicator	46.1	47.7	48.1	48.3	49.1
Numerator	23443	24458	24390	23563	18424
Denominator	50803	51223	50687	48740	37542
Is the Data Provisional or Final?				Final	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	32.6	30.4	28.2	26	23.8

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Numerator and Denominator: Preliminary data provided by the Office of Informatics and Technology Advances (OITA) of the Department of Health.

Notes - 2005
Numerator and Denominator: Preliminary data provided by theOffice of Informatics and Technology Advances (OITA) of the Department of Health. It include data as of September 2005.

a. Last Year's Accomplishments
Puerto Rico has been experiencing an increasing trend in the cesarean section (C/S) rates for more than a decade. In order to explore the underlying factors that could explain this trend and identify potential strategies to reduce the number of unnecessary C/S deliveries in the Island, the MCH Division has conducted several studies during the past 15 years. They can be divided into three phases. The initial phase consisted of reviewing birth certificates of infants delivered by C/S from 1990-1999. During the second phase, staff reviewed records from a sample of live births delivered by C/S during 1999. The last phase included a self-administered survey filled out by a representative sample of postpartum women who delivered in 2004. The information gathered by the survey was used to explore women's attitudes and beliefs as well as the influence family members and health care providers' personal and practice characteristics had on the delivery route ultimately chosen. Results of these studies revealed: an increase in both primary and repeat C/S rates, low vaginal birth after C/S (VBAC) rates (<8%); C/S deliveries occurring mostly during workdays and daytime hours; highest rates among women 20 to 29 years old and those with more than 12 years education, and finally 77% of the charts evaluated did not document a reason to justify a C/S delivery. The evidence failed to pinpoint one specific contributing factor that could explain the elevated C/S rate. However, the results of the survey study seemed to imply the attitudes and beliefs of the prenatal care physician could be contributing to the delivery method chosen.

We disseminated information regarding the issue of the high C/S rates in Puerto Rico by publishing articles in local newspapers and in scientific journals. The article "Rates of Cesarean Delivery among Puerto Rican Women-Puerto Rico and the US Mainland, 1992-2002", a collaborative effort between CDC and MCH staff, was published in the Jan 2006 MMWR issue. A revised version of the article appeared in the June 2007 edition of ACOG's Obstetrics & Gynecology Journal. Our Obstetrics and Gynecology Consultant appeared in a TV spot in the local public broadcasting station in 2006. Her message was directed at increasing the general population's knowledge regarding the indications for and the risks associated with a C/S delivery

with the purpose of empowering them to make well informed decisions regarding the delivery route they would choose if the occasion arose.

During this time the Committee for the Evaluation and Reduction of C/S in PR was convened to review the data from all the studies with the hope of gathering additional insight on how to deal with the issue. After completing the task and faced with the 2006 NIH Consensus document that failed to provide strong evidence against performing a C/S delivery upon maternal request, the Committee adjourned without identifying new or innovative strategies to solve the problem.

Nevertheless, MCH staff continued to educate and raise awareness regarding the issue at the community level and among pregnant women and health care professionals. During CY 2006, all 6,593 participants of the HVP were oriented by the Program nurses on the pros and cons of a C/S delivery. Also, during FY2006-2007, CHWs provided 149 educational activities on the subject reaching 1,926 persons.

The findings of the survey of postpartum women were disseminated during the PR Annual Epidemiology Conference held in Aug 2006 in San Juan. During the 3rd PR Public Health Conference, the UPR School of Public Health MCH Program presented the results of a focus groups study they conducted with 111 primiparous women who experienced a C/S in order to gain insight regarding their personal experience during the delivery.

The MCH Division has endorsed public policies that protect women's rights at the time of delivery. PR Law 156 of 2006 states that women must be adequately informed about all the positive and negative aspects associated with the delivery options so they can make informed decisions.

MCH staff participated in the birth certificate revision process to insure information needed to analyze MCH data was present. During the process we made sure the quality and quantity of data they collect would allow us to analyze factors that contribute to a C/S delivery, particularly those related to pregnancy complications.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Monitor the changes in numbers of cesarean section deliveries by health care facilities for 2006 and provide feedback to the administrators.				X
2. Continue to monitor the trend in C/S rates in Puerto Rico using vital records information.				X
3. Share the results of the studies carried out by the MCH Division and other collaborators with all those interested in studying this issue further and collaborate with them in this endeavor.				X
4. Continue to educate pregnant women about the indications for and risks associated with a C/S delivery in order to help empower them to avoid unnecessary cesarean deliveries.			X	
5. Continue providing educational activities and individual orientations regarding the pros and cons of a cesarean delivery when Home Visiting Nurses visit the participants of the Program.			X	
6. Continue to develop and promote the adoption of a public policy that would provide tax credits to hospitals that offer paid leave to nurses who want to pursue studies to become nurse midwives.				X
7. Endorse perinatal health providers' CME activities that				X

increase their level of awareness regarding the increasing C/S rates and encourage them to avoid unnecessary cesarean procedures.				
8. Promote the implementation of the obstetrics hospitalist program in local birthing hospitals in order to reduce obstetricians' workloads and assure women in the delivery room a qualified health provider is available in the facility.				X
9. Continue to convene the DoH Committee for the Evaluation and Reduction of C/S in PR at least on a quarterly basis.				X
10.				

b. Current Activities

In Feb 2008 the Committee for the Evaluation and Reduction of C/S rate was convened to analyze this situation, determine the role it would assume and propose the strategies it would implement to reduce C/S rates in PR. During the meeting, proposals aimed at decreasing unnecessary C/S and helping prenatal health providers and birthing hospitals reduce their rates were discussed. Most of them were directed at addressing the constant reduction in the number of obstetricians providing services to pregnant women.

Among the strategies entertained were to promote a public policy that would provide tax credits to hospitals that offered paid leave to nurses while they studied to become certified nurse midwives. The Committee believes that increasing the numbers of available licensed midwives could help solve the problem by providing obstetricians additional assistance as they offer routine prenatal care, intrapartum and postpartum care. Another strategy entertained was to implement the obstetrics hospitalist program in order to reduce obstetricians' workloads and at the same time insure women in the delivery room have a qualified health provider available in the facility.

The MCH staff continue to raise awareness and educate on the issues related to unnecessary C/S at community level. HVP nurses provided individual interventions and educational activities on C/S pros and cons to 6,390 Program participants. CHWs offered 33 educational activities and reached 132 persons.

c. Plan for the Coming Year

During this coming year, the MCH Program will continue its efforts to reduce the C/S rates in PR. We will continue to share C/S investigations findings with key stakeholders and other interested parties. If new research questions or areas of interest regarding this issue emerge, we will collaborate by conducting additional studies in order to shed light on this very hard to study and define problem. We will also collaborate with and endorse continued education events directed at increasing the level of awareness providers, general public and other key stakeholders have regarding the PR extremely high C/S rate.

The MCH Section for Monitoring, Evaluation, Investigation and Systems of Information will continue monitoring the tendency of C/S deliveries rates for each health institution in PR and provide feedback to their administrators. This will represent an opportunity for institutional self evaluation and for implementation of strategies directed at reducing or eliminating factors that contribute to the high C/S rate in PR.

Women of reproductive age will continue to receive individual orientations and group education provided by MCH staff across the Island on important aspects related to cesarean deliveries, including information regarding their right to be informed about delivery options and the risks involved with each at the time of delivery.

The MCH Division will collaborate with the DoH Committee for Evaluation and Reduction of C/S in further elaborating public policies directed at reducing unnecessary C/S in PR, such as

legislative piece HR #2408. If approved it will provide tax credit to hospitals that offer paid leave to nurses who want to become licensed midwives. Our MCH Division will also promote the establishment of an obstetrics hospitalist program.

State Performance Measure 6: *Develop and maintain an active surveillance system for at least 55 birth defect diagnoses by 2010.*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	2003	2004	2005	2006	2007
Annual Performance Objective				87	87
Annual Indicator	69.1	69.1	69.1	69.1	78.2
Numerator	38	38	38	38	43
Denominator	55	55	55	55	55
Is the Data Provisional or Final?				Final	Final
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	87	100	100	100	100

Notes - 2007
The source of both the numerator and denominator is the BDSS.

Notes - 2006
The Birth Defects Surveillance System (BDSS) continues with population based active surveillance activities for 38 birth defects diagnoses in 100% of birthing hospitals, and at four pediatric hospitals in the Island. We were able to add 5 more birth defects starting January 1st, 2007. These defects are: single ventricle, double outlet right ventricle, hipospadias, epispadias, and Jarcho-Levin syndrome.

Notes - 2005
The Birth Defects Surveillance System continues with population based active surveillance activities for 38 birth defects diagnoses. At present we are planning to add 10 more birth defects starting in 2007. The goal continues to increase to 55 Birth Defects by the year 2010.

a. Last Year's Accomplishments
MCH is committed with maintaining an active population based surveillance system and preventing birth defects (BD) in PR. The BDSS has continued to regularly revise and implement a protocol for the active surveillance of 43 birth defects island wide. The BDSS has 6 trained nurse abstractors, who regularly visit 100% of birthing hospitals, pediatric cardiologists offices and pediatric hospitals in PR. During 2006, we identified 943 cases with BD. Additional cases from previous years were also identified. We continued to link 2005 VS Records and BD Surveillance data sets to identify cases that might have been missed. When potential cases were identified, our abstractors proceeded to review medical records. These efforts have led to the identification of 28 new cases for 2005. BDSS activities have contributed to the health and wellbeing of the identified children by providing them with an early referral and enrollment in community based, family centered Habilitation Services Centers (CSHCN) and other support programs available locally. The BD referral protocol to the CSHCN services, implemented initially as a pilot project, was extended island wide.

We continued planning and implementing the activities included in the Alliance for BD Prevention Plan. During this past year, we held a total of 8 meetings. Most of them were devoted to planning major folic acid campaign activities. In October, we celebrated the Folic Acid Awareness Day. During the Folic Acid Awareness Day we were able to reach 85% of the public schools and 30 University Campuses. We estimate 3,000 students received an educational kit containing a fortified cereal and culturally sensitive educational brochures with prevention messages. We

celebrated our 5th Symposium "Research and Prevention of Birth Defects" in June 2007, reaching close to 550 participants including physicians, nurses, health educators, and other health professionals. Topics covered during the activity were: Multidisciplinary Management of Craniofacial Disorders, Detection and Diagnosis of BD, Economic and Psychosocial Impact of BD, Gastroschisis in PR, Management of Sexual Ambiguity, Prevalence of Metabolic and Genetic Disorders in PR and Health Insurance for babies with BD.

During the year, we continued our efforts to increase BD awareness at the population level. We participated in 31 health fairs and were able to directly impact 9,821 participants. A total of 25,432 educational materials and promotional articles have been distributed. In addition, 311 elementary and high school educational modules were distributed. We have also contributed by educating health professionals on the topics of preconceptional health, birth defects prevalence and their prevention, natural history and etiology. During this year, we gave a total of 27 lectures attended by 2,027 persons; 16 to 1,250 health professionals, 8 at the community (549), and 3 to 228 teachers. During the year, the BDSS staff visited hospitals and provided trainings on the importance of reporting cases and the natural history and etiology of birth defects.

In January 2007, we celebrated BD prevention month. A media tour included TV interviews, 3 newspaper and 5 health magazines articles on BD prevention. In addition, the Senate, 4 major banks, and 30 University branches distributed material containing prevention messages to their clients, employees, and students or included related messages in their e-mails.

The BDSS accomplished its goal of disseminating reliable BD statistics. The 2005 Annual Report with updated statistics on 43 birth defects was published and distributed to 5,000 health professionals. The report is also available in the DoH website.

In February 2007, we attended the Birth Defect Prevention Network Meeting where we presented a poster entitled "Evaluation of Neural Tube Defects Prevalence Trends and Folic Acid Use in PR 1996-2005", and gave an oral presentation on our efforts to include prenatal cases in the BDSS. Two oral and one poster presentation on Folic Acid Blood Levels were presented in the PR Public Health Conference.

We were able to develop and distribute 3,500 BD educational modules among health professionals. They included information on BD law, BD Surveillance System, a summary of major BD, and folic acid. We were able to offer 5 CME credits those who completed it. We continued to promote compliance with the BD Surveillance Law among health service agencies and health care providers.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Increase to 48 the birth defects included in the Surveillance System.				X
2. Continue the active BD surveillance system activities such as data collection, protocol updates, data analysis and evaluation.				X
3. Coordinate activities with our collaborators to promote healthy lifestyles in order to prevent birth defects and to organize and conduct activities associated with BD prevention month celebrations in PR.			X	
4. Improve the referral system for children with birth defects; continue to offer genetic counseling to affected families and referral to CSHCN centers.		X		
5. Develop and implement a protocol to identify birth defects clusters.				X

6. Develop culturally sensitive educational materials on the five recently added BDSS birth defects.			X	
7. Offer trainings on the birth defects surveillance system to hospital staff throughout the Island.				X
8. Prepare and publish the Annual BD Report in order to disseminate the surveillance results.				X
9. Disseminate regulations and promote compliance with Law 351 among health care providers, including the importance of early diagnosis and referral to specialized services.				X
10. Use GIS technology to visualize and study the geographic distribution of birth defect cases.				X

b. Current Activities

We continue with our active, population based BD surveillance system. We have recruited a new abstractor and now have 7 nurses gathering data. We continue to gather data from cases diagnosed prenatally at the High Risk Clinic of the University Hospital. FIMR staff is notifying us of the BD cases they are identifying.

In January we expanded our BDSS to include 5 additional case definitions, for a total of 48 BD diagnoses. We believe we are currently conducting active surveillance for the most common birth defects that occur in PR and do not expect to add further diagnostic conditions in the near future unless a specific need for this arises.

Law 351 regulations were approved in September 2007 and are being distributed. We continue to provide genetic counseling to parents of infants with a reported BD.

In January 2007 we held a press conference to promote BD prevention messages and daily folic acid use. During the month, we participated in 3 TV and 1 radio interview. Five major newspapers published BD related articles. The Senate and 30 university campuses distributed materials with prevention messages to celebrate BD Prevention Month. A poster with the results of the Folic Acid Campaign evaluation was presented during the NBDPN Annual Meeting.

The Epidemiologist developed a protocol to identify BD clusters. We are in the process of mapping BDSS cases using GIS technology and studying BD distribution in PR. The BDSS Annual Report with 2006 data will be published in June 2008.

c. Plan for the Coming Year

For the next year, we will continue our active surveillance for the 48 birth defects included in the BDSS and with the BD prevention activities required by Law 351. We will modify the current surveillance protocol as needed. Monthly trainings will be held with all data abstractors in order to improve their abstracting skills. Among the topics to be covered are the different aspects of the birth defects surveillance system as well as the natural history and etiology of birth defects. We will continue performing record linkage with vital statistics data, medical insurance companies, and other agencies in order to improve the completeness of our database. In addition, we plan to maintain our efforts toward establishing new partnerships with entities that may help us identify additional data sources and thus increase our potential to identify all birth defects cases included in our surveillance system.

We will continue with the process of geocoding our database and preparing spatial maps that will help us visualize the geographic distribution of birth defects in Puerto Rico. We are planning to begin the cluster protocol for hypospadia cases, in order to identify if a cluster of these cases is occurring. We will continue to publish our surveillance outcomes in the peer review journal "Birth Defects Research Part A: Clinical and Molecular Teratology".

We will continue to disseminate an annual surveillance result report and to increase awareness of birth defects prevention measures among the general population and health care professionals. The fifth BDSS Annual Report with 2007 updated statistics will be prepared and published by June 2009. In addition, culturally sensitive educational materials on 6 BD: gastroschisis, omphalocele, oral clefts and trisomy 13, 18, and 21, will be developed. We also plan to offer health care providers educational activities with the purpose of promoting awareness of the need to continue promoting folic acid consumption, birth defects prevention messages and to make them aware of the surveillance activities currently occurring in PR.

Efforts to reinforce PR Alliance for Birth Defects Prevention membership will continue. We will identify and invite potential collaborators and stakeholders to become new members. The BDSS will celebrate BD prevention month with a series of activities during the month of January 2009. During this time a mass media campaign will be coordinated to promote BD prevention messages. We will also continue celebrating the Folic Acid Awareness Day in local university campuses and public schools.

State Performance Measure 7: *Reduce the prevalence at birth of neural tube defects (NTD's)*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	5	4	4	3	6
Annual Indicator	4.1	5.2	10.3	7.2	9.6
Numerator	21	27	52	35	47
Denominator	51351	51776	50687	48744	48744
Is the Data Provisional or Final?				Provisional	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	6	6	5	5	5

Notes - 2007
The source of the numerator is the BDSS, and the source of the denominator is the Vital Statistics Live Birth Certificates.

Notes - 2006
The annual objective and performance data was revised after a validation effort of our datasets. Therefore, our annual indicators are higher than shown on the table; for 2004 the annual indicator was 8.4. The Birth Registry final database for 2005 is preliminary; we are in the process of gathering data from the 2005 vital statistics to perform record linkage between the data bases. The 2006 prevalence ratio is provisional since the total live births for 2006 is not available yet, so it was estimated from the Birth Registry 2005 data. We are also awaiting data from August to December from two municipalities.

Notes - 2005
The annual performance measure wording was revised to be in accordance with the terminology and measure of objective 16.15 from Healthy People 2010. We are reporting the prevalence at birth of the NTD. The numerator was provided by the Birth Defects Surveillance System. The 2005 prevalence ratio is provisional. The total live births were estimated from the Birth Registry preliminary data. The annual performance objectives were also revised for years 2004 to 2010. Reported data shows Birth Surveillance cases identified through the population based active surveillance and after linking vital stats data sets. The percentage increase in the prevalence ratio might be related with new efforts to confirm cases from the vital stats data sets and by the implementation of Law 351 for the regulation of Birth Defects Surveillance in Puerto Rico. We have continued with surveillance in 100% of birthing hospitals, and at the two pediatric hospitals

in the Island, and recruited two more abstractors to conduct surveillance sponsored by CDC funds.

a. Last Year's Accomplishments

During 2006-2007, we continued promoting folic acid use to reduce preventable Neural Tube Defects (NTD). A wide variety of activities were developed to raise awareness about the importance of taking folic acid on a daily basis. Last year, we participated in 39 health fairs around the island and reached 9,821 participants at the community level. MCH staff provided 805 educational activities during which folic acid promotion messages were provided. A total of 9,071 persons attended these activities. We continued to develop culturally sensitive educational materials and distribute them to health professionals. Our program has established close collaborative efforts with insurance companies in order to have their health care providers take a more active role in educating the population they serve about the benefits of folic acid and becoming active promoters of their daily intake.

On October 2006, we celebrated the 5th Folic Acid Awareness Day in 30 university campuses. Over 3,000 university students participated in the celebration. This year we extended our scope of action to include 85% of the public schools island wide. During that day, participating universities distributed educational material and MCH Division staff provided information on the importance of folic acid consumption for the prevention of NTD. All participating students received free samples of fortified cereals with 100% folic acid and pill boxes. In addition, a press release was published promoting the activity.

In January 2007, we celebrated several activities to commemorate Birth Defects (BD) Prevention Month. During these activities, we also promoted the importance of daily folic acid intake as one of the strategies to prevent BD. As part of the activities held to celebrate BD prevention month we participated in two TV and three newspaper interviews. A one-page article was also published in "El Nuevo Día", the local newspaper with the largest circulation island wide. Other regional newspapers followed their lead and published additional articles. Kits with information on BD prevention, prepared by the National Birth Defects Prevention Network (NBDPN), were distributed to 130 key collaborators. Members of the Alliance have also contributed to disseminate the message by publishing several articles in their companies' web pages.

The BD Prevention Alliance has continued to meet regularly. A total of 8 meetings were held. Two BD prevention commercials were filmed with the collaboration of the Alliance for BD Prevention. The Fifth Symposium focused on Research and Prevention of Birth Defects was held in June, 2007. A total of 546 persons participated in the event.

Lectures on BD etiology, natural history and risk factors were offered island wide; one to 20 pediatricians in the Caguas area, 4 to hospital staff, 1 during the PR Annual Epidemiology Meeting, 1 to 129 students of a private school, 1 to 80 ASPIRA students, and one regarding management of patients with cleft lip/palate to 100 professionals. We also offered 5 lectures to university students, in which 200 of them participated. In addition, 16 lectures were given to health care professionals and 8 at the community level. Trainings promoting BD prevention messages were offered to 250 Home Economics teachers of the Department of Education and to a group of science and health teachers of the Catholic Schools of PR. We also offered 12 CME educational activities for health care and education professionals.

PR BRFSS 2006 folic acid module data was analyzed to determine the number of non pregnant women of reproductive age who ingest folic acid on a daily basis in Puerto Rico. This data revealed only 24.8% of women reported taking folic acid daily, while 56.5% responded they knew folic acid helps prevent NTD's. Thus, we must continue reinforcing our messages about the importance of daily folic acid intake. In addition, we must strongly promote compliance with the existing DoH Public Policy which recommends taking a multivitamin containing 400 micrograms of folic acid daily for all women 10 years of age or older. The collaborative effort between the Department of Education and the Folic Acid Campaign provides for the inclusion of folic acid

prevention messages in the public school health curriculum at the elementary, intermediate and high school level on a permanent basis.

Table 4b, State Performance Measures Summary Sheet

Activities	Pyramid Level of Service			
	DHC	ES	PBS	IB
1. Increase awareness among primary care providers of the need to recommend daily folic acid consumption.				X
2. Use trained insurance company personnel to promote use of daily folic acid among patients visiting medical offices.				X
3. Hold meetings with key stakeholders to develop strategies directed at increasing use of folic acid.				X
4. Promote the use of the Folic Acid Educational Module among teachers covering health issues in PR schools.			X	
5. Coordinate activities to increase awareness of birth defects and strategies to prevent them among the general public.			X	
6. Coordinate Folic Acid Awareness Day observances in local university campuses.			X	
7. Educate students in health-related fields regarding their role in promoting the use of folic acid.			X	
8. Continue interagency collaborative efforts to promote use of folic acid in the media.				X
9. Continue regular meetings of the State Alliance for Birth Defect Prevention.				X
10. Evaluate levels of folic acid awareness and consumption among women of reproductive age.				X

b. Current Activities

The benefits of folic acid consumption and information regarding NTD prevention continue to be provided at the community level. We have distributed 46,249 educational material and promotional incentives. The Folic Acid Awareness Day was held on October 2007. The Alliance held 6 meetings. The BD prevention commercials are being distributed to TV stations for use as PSA's.

A survey was developed and administered in collaboration with The Marketing Center Co to evaluate the impact of the FA Campaign in PR. We analyzed the data and presented the results in a poster during the NBDPN Annual Conference. The data obtained is helping us refocus the campaign.

We analyzed 2006 PR BRFSS folic acid module and conducted an analytic study comparing folic acid use in WCBA and NTD's trends. In January 2008 the results were published in the MMWR: "Prevalence of NTD's and Folic Acid Knowledge and Consumption, PR 1996-2006". ESMIPR data show 21% of surveyed women consumed FA daily.

Nineteen conferences on BD etiology and their natural history have been offered. We have participated in 104 health fairs and reached 11,852 participants at the community level. We trained Episcopal Schools teachers and have completed training all Department of Education Home Economics teachers. In all, 670 teachers were trained and 807 HS and elementary instructional modules distributed. Currently, we are conducting the post intervention evaluation for the instructional modules included in the public schools curriculum.

c. Plan for the Coming Year
For the coming year, we plan to continue offering educational activities. However, this year we will direct our efforts toward increasing the level of awareness among birthing hospitals staff and health care providers of their need to promote daily folic acid intake. In addition, we plan to increase their knowledge regarding additional birth defect prevention strategies and the surveillance activities that are occurring island wide. We will continue to promote the inclusion of the folic acid instructional module at the Junior and Senior High School level among health teachers in the PR private schools.

The distribution of culturally sensitive educational materials that include messages related to the importance of daily folic acid use and other birth defects prevention strategies will continue when we participate in health fairs at the community level, schools, universities, public and private agencies. MCH staff will also continue offering educational activities for the promotion of daily folic acid use. In addition, we will continue to promote the collaborative efforts we have already established with local health insurance companies in order to have their health care providers help us to increase folic acid awareness level and actively promote daily folic acid intake among their clientele. Our annual celebration of the Folic Acid Awareness Day will be held at local universities and public schools facilities, in October 2008. In January 2009, we expect to again celebrate BD prevention month with a series of activities. In August 2008, we will celebrate our Sixth Annual BD Symposium.

We plan to continue supporting the PR Alliance for Birth Defects Prevention in their efforts and with their help continue to develop and distribute culturally sensitive educational materials. The TV commercials filmed in collaboration with Alliance members are expected to be aired by 3 major TV stations as PSAs. This strategy was selected based on the findings provided by the marketing company study which clearly demonstrated TV ads elicit the greatest amount of recall of our campaign. We will continue our collaborative efforts with other agencies and stakeholders to develop additional strategies to prevent NTD's. A Preconceptional Health Committee was recently established and alongside them and all of our other collaborators we plan to promote preconceptional messages that help prevent birth defects.

To monitor compliance with folic acid use in WCBA, we will continue conducting the ESMIPR survey. Results from the 2008 bi-annual PRAMS-like survey will be available by the end of the summer 2008. It will provide us with data regarding daily folic acid use. The PR BRFSS 2008 folic acid module data will also provide us additional information for us to analyze and share.

State Performance Measure 8: *The rate of deaths to children aged 1-14 caused by asthma*

Tracking Performance Measures
[Secs 485 (2)(2)(B)(iii) and 486 (a)(2)(A)(iii)]

Annual Objective and Performance Data	**2003**	**2004**	**2005**	**2006**	**2007**
Annual Performance Objective	0.2	0.2	0.2	0.2	0.1
Annual Indicator	0.0	0.2	0.2	0.1	0.3
Numerator	0	2	2	1	2
Denominator	828372	815120	803507	791992	778238
Is the Data Provisional or Final?				Provisional	Provisional
	2008	**2009**	**2010**	**2011**	**2012**
Annual Performance Objective	0.1	0.1	0.1	0.1	0.1

Notes - 2007
Updated data for 2007. For source of information refer to 2006 notes.

Notes - 2006
Numerator: Preliminary data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.
Denominator: Population estimate obtained from the US Census for Puerto Rico.

Notes - 2005
Numerator: Preliminary data obtained from the Office of Informatics and Technology Advances (OITA) of the Department of Health.
Denominator: Population estimate obtained from the US Census.

a. Last Year's Accomplishments
In 2006, there was 1 asthma related death in the 1-14 age group and in 2007, 2 such deaths were reported. To prevent them, the State Asthma Plan has established 7 Focus Area Committees integrated by PR Asthma Coalition (PRAC) members: Partnerships, Surveillance, Health Promotion/Education, Public Policy, Environment, Access to Health Services and Evaluation. These committees define priorities and the SAP interventions to be implemented based on a needs assessment, data from the PR Asthma Surveillance System (PRSS) and other partners' input.

PRSS prepared the epidemiological profile of asthma in PR that has been shared with our partners and other interested agencies and investigators. Some of its data comes from health insurance companies' health services utilization data. PRSS activities have been enhanced by the hiring of a biostatistician to reinforce our data analysis capacity, by creating a data warehouse (DW) to facilitate data collection and by including data from the BRFSS childhood asthma module.

In 11/06 the Asthma Project (AP) received a TA from the University of Michigan "Allies Against Asthma". The main objective of this TA was to maintain PRAC members actively involved and participating during the SAP implementation phase. A total of 38 partners participated. Topics included: review of accomplishments; strategies that can be employed during implementation; next steps; trust, negotiation and accountability; where to get funding; and general discussion. A report was submitted by Allies with recommendations on next steps to be followed by the AP and the PRAC.

The AP offered 5 CME trainings to PCPs and health professionals on the use of NAEPP Asthma Treatment Guidelines in areas with the high rates of asthma morbidity and mortality. A total of 182 persons participated. Participation turn out was excellent since 87% of those pre registered attended. Local HICs helped identify and invite PCPs. A pediatric pulmonologist based his lecture on the Easy Breathing Program developed by the Connecticut Children's Medical Center. Our PR version of the program is being called "Proyecto CALMA". This project has been validated by an Independent Practice Association trained to use this model which focuses on disparities. The main goal is to help PCPs provide quality care and education to children with asthma. Topics included are: SAP, PRSS data; basic concepts on the diagnoses of pediatric asthma; the best treatment for the asthmatic patient and strategies to prevent asthma in children. Materials were provided by Proyecto CALMA and PR Lung Association.

Asthma trainings were favorably evaluated. Participants' recommendations included expanding trainings to include hospital setting management and to provide the information using a website or by e-mail.

In response to a request submitted by the PR Dept. of Education, the SAP's Public Policy Committee completed their revision of the bylaws for Law #56, "Law for the Treatment of Students with Asthma". This law will enable students to self-administer asthma medications at school. Recommendations to the bylaws were submitted for revision and approval by the Secretary of Health. In addition, this sub Committee has held 4 meetings to discuss issues related to access to long-term asthma medications for HCR participants and to recommend

alternatives on what changes can be made in order to increase GIP insured asthmatics access to these medications.

The AP staff has been actively involved with PR Clean School Bus Alliance. They helped them write a proposal to request funds from EPA in order to reduce school bus idling time and to allow them to start a "retrofitting" program with Diesel Oxidation Catalyst.

In May 07, we celebrated World Asthma Day. Among WAD related activities we would like to highlight: an asthma supplement in one of the newspapers (205,000 copies), a symposium on local asthma investigation and a media tour (3 radio shows) used to emphasize asthma patients need to become empowered in their management of the condition and to promote the PRAC's information line.

In March 07, the AP staff presented the SAP and PRSS findings to 117 health professionals from the 330 Community Health Centers. This information was also presented shared with representatives from EPA, San Jorge Children's Hospital and Merck.

MCH staff supports the SAP implementation phase and is monitoring its progress towards achieving this performance measure and other asthma related indicators.

Table 4b, State Performance Measures Summary Sheet

Activities	**Pyramid Level of Service**			
	DHC	**ES**	**PBS**	**IB**
1. Hold meetings with SAP Focus Areas Committees to prioritize interventions based on identified needs and PRSS data.				X
2. Promote policy changes for asthma care and management.				X
3. Continue asthma surveillance system to assess asthma morbidity, mortality, utilization of health services and work-related asthma.				X
4. Train health professionals in asthma management according to NAEPP asthma management guidelines.				X
5. Analyze and interpret asthma data, and report findings and recommendations to key stakeholders.				X
6. Meet Healthy People 2010 objectives for respiratory diseases by implementing the State Asthma Plan.				X
7. Collaborate with asthma educational programs including EPA’s Clean School Bus USA, Schools: An Asthma Friendly Environment (SAFE), and other initiatives of State Asthma Plan partners.				X
8. Implement the State Asthma Plan as part of the CDC Asthma collaborative agreement. Focus Areas include: Partnerships, Surveillance, Health Promotion and Education, Public Policy, Environment, Access to Health Services, and Evaluation.				X
9. Increase level of awareness among key stakeholders and the general population regarding asthma in PR and the State Asthma Plan.			X	
10.				

b. Current Activities

Ten asthma training sessions on asthma management have been held. A total of 424 persons participated in them. Adult asthma management guidelines and pocket guides for asthma management in children and adults were distributed in the trainings. Health Educators have provided 220 activities on asthma and associated trigger factors reaching 2,603 participants.

PRSS is updating the PR asthma epidemiological profile based on health services utilization, mortality and prevalence data. The child random selection and the children and adult asthma history modules were included in BRFSS. A preliminary report on Work Related Asthma was prepared and presented to State Insurance Fund (SIF) officials. We are meeting with them to improve the quality of the data collected in WC claims.

The MCH Division continues to implement SAP activities such as: expanding the PRSS, improving the DW; identification of areas with high rates of morbidity, mortality and services utilization; training PCP in asthma management; sharing SAP and PRSS report; expanding our data base.

The EPA's Clean Bus grant was approved. The AP will help educate bus owners about the harmful effects of CO and the advantages of retrofitting the buses.

The Public Policy Committee continues to work to increase the number of GIP asthma patients on long-term medications.

WAD activities included a press conference by the Secretary of Health to present the SAP and Epidemiological Asthma Profile.

c. Plan for the Coming Year

The MCHD will continue to conduct activities included in the SAP to meet the HP 2010 objectives for Focus Area #24. Some of these are: expanding the PRSS; identifying areas with the high asthma morbidity, mortality and utilization of services rates; training PCPs and other health professionals in asthma management; distributing the SAP and PRSS report; increasing the general public's level of awareness regarding the asthma situation in PR and activities that are going on; improve the DW and finally establish additional MOU's with data providers.

The PRSS will continue to prepare and submit annual surveillance reports based on health services utilization claims, mortality, prevalence and work-related asthma. Asthma call-back questions will be included in the 2009 BRFSS questionnaire.

SAP and PRSS findings will be presented in different venues in order to raise awareness of the asthma burden PR is experiencing and efforts being carried out by the PRDoH and AP to reduce asthma morbidity and mortality.

The MCHD will continue to collaborate with the PR Clean School Bus Alliance, health insurance companies, and with other PRAC member's asthma related educational interventions.

The AP will begin training HVN on the basics concepts related to asthma, identification of the signs and symptoms associated with the disease, control and prevention measures, identification of asthma trigger factors in the household and promoting indoor air quality in homes of patients with asthma.

E. Health Status Indicators

/2007/ The availability of information based on valid, reliable data is an important requirement for the analysis and objective evaluation of the health situation, evidence-based decision-making and the development of strategies to promote health among our population. Traditionally, this requirement is done using a variety of health indicators that facilitate the quantification and

evaluation of the different dimensions of a population's health. In general, health indicators represent a summary of measures that capture relevant information on different health attributes and dimensions, and also represent the performance of the health system. Seen together, these measures attempt to reflect and monitor the health status of a population and provide information for the elaboration of a relevant profile of a population's health situation. Health indicators are influenced by social determinants like poverty status, population distribution and characteristics that should be analyzed and monitored to have a clear perspective of the situation.

In order to assess the maternal and infant health status and to compare it by municipalities, the Maternal and Child Health Division developed the Integrated Index of Maternal and Infant Health Status (IIMIHS) in 1998. The Index includes 15 indicators selected from birth and death files. The IIMIHS is comprised of five socio-demographic indicators: (1) Natality rate, (2) Percent of unmarried women, (3) Percent of adolescent mothers, (4) Percent of unmarried adolescent mothers, and (5) Percent of mothers with less than 12 years of education. Two are related with the adequacy of prenatal care: (1) First trimester admission rate, and (2) Kotelchuck Index. The remaining eight reflect the pregnancy outcome indicators: (1) Percent of prematurity, (2) Percent of VLBW, (3) Percent of LBW, (4) Neonatal mortality, (5) Post neonatal mortality, (6) Infant mortality rate, (7) Stillbirth rate, and (8) Perinatal mortality rate. MCH Regional Staff analyze the IIMIHS for their particular region on a continuous basis and include the identified needs in their action plans. Part of the dissemination efforts that regional MCH programs will be performing includes meetings with mayor of each municipality in coordination with the Healthy Start Consortium.//2007//

/2008/ The dissemination efforts that regional MCH Programs will continue performing include meetings with the mayor and community members of each municipality and SSDI Regional Meetings. //2008//

/2009/ The MCH Division will disseminate MCH related information by publishing the MCH Health Status Data Book. It will include VS data and results of the epidemiologic and qualitative studies our staff have conducted.//2009//

/2007/ HSI 01 & 02 - Low Birth Weight and Very Low Birth Weight are two of the leading causes of neonatal and stillbirth deaths. In 2004, 537 stillbirths were registered in Puerto Rico; 64% were LBW and VLBW. Preliminary data for 2005 suggest an increment in stillbirths with LBW and VLBW (439 of 508 fetal deaths, 86.4%). In Puerto Rico most of the fetal deaths occur in the early fetal period (20-27 weeks) and 6 out of 10 stillbirths are very low birth weight. This situation reflects problems associated with maternal health prior to pregnancy as well as problems related with the quality of care received during pregnancy.

Low birth weight and preterm birth are an increasing problem and constitute the number one cause of infant mortality in Puerto Rico. These indicators have been monitored through the years to determine the trend in LBW and VLBW births rates in Puerto Rico. In 2003, the LBW rate was 2.3 times higher than our 2010 objective. In 2004 the LBW and VLBW rate remained relatively constant (11.5% and 1.5%, respectively).

Birth data for 2005 is still preliminary; however, reported LBW rates are 12.9% for all live births and 11.5% for singletons. Regarding VLBW, rates reported were 1.5% for all live births and 1.3% for singletons. Although preliminary data shows a reduction in the LBW and VLBW rates, we will wait until the Vital Statistics database has been revised and information is made official before drawing conclusions based on this evidence. As expected, rates are lower for singletons than for multiple births.

Efforts to improve these indicators are conducted by the MCH Program. Through the Home Visiting Program, the MCH Program provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors associated with LBW and VLBW infants. The WIC Program also contributes toward reducing

these rates by focusing on women who present nutritional risk factors. In 2005, the WIC Program provided services to 21,889 pregnant women.

The MCH Program provides educational interventions directed at HVN, providers and the population at large to increase awareness regarding the elevated LBW in PR and its implication for the infants' survival. During the activities, staff encourage WCBA to abstain from high risk behaviors and offer recommendation to reduce factors that contribute to these poor outcomes.//2007//

/2008/ Low Birth Weight and Very Low Birth Weight are two of the leading causes of neonatal deaths. Preliminary 2006 birth data, reported LBW rates are 13.2% for all live births and 12.1% for singletons. Regarding VLBW, rates reported were 1.5% for all live births and 1.2% for singletons. Although preliminary data shows an increase in the LBW rates, we will wait until the VS database has been revised and information is made official before drawing conclusions based on this evidence. As expected, rates are lower for singletons than for multiple births.

The MCH Division will continue efforts to improve these indicators through the Home Visiting Program that provides case management/care coordination, health education and counseling to pregnant women with complex medical and social risk factors. The Community Outreach Program encourages WCBA to abstain from high risk behaviors and offer recommendation to reduce factors that contribute to these poor outcomes. The MCH Program provides educational interventions directed at HVN, health care providers and the population at large to increase awareness regarding the elevated LBW in PR and its implication for the infants' survival. //2008//

/2009/ LBW, VLBW and prematurity constitute the main causes of IM in PR. Preliminary 2007 birth data reported LBW rates are 12.6% for all live births and 11.3% for singletons. Regarding VLBW, rates reported were 1.5% for all live births and 1.2% for singletons. As expected, rates are lower for singletons than for multiple births.

The MOD Prematurity Task Force (PTF) analyzed preterm births and failed to link differences in socioeconomic status, educational level, C/S delivery, multiple births and age with the rising trend in preterm births in PR. An initiative directed at improving preconceptive health Initiative among WCBA has been started.//2009//

/2007/ HSI 03 & 04 - Unintentional injuries are one of the leading causes of death in the adolescent and young adult population in Puerto Rico. Obtaining reliable data and analyzing it allows us to have the evidence to guide our decision processes and for developing action plans, such as regulatory and legislative measures. Having long term information regarding these indicators facilitates the analysis, interpretation and evaluation of the impact of prevention strategies that have been implemented. The Maternal and Child Health Division makes an annual report that describes the number and the cause of deaths by age group according to the objectives of Healthy People 2010. Information must also be shared with our collaborators, particularly with Safe Kids Coalition and the EMSC program, since they use this information for press conferences, raising awareness, presentations to health professionals, and in training activities.

The MCH Division regularly monitors Vital Statistics data of deaths resulting from unintentional injuries. These deaths are analyzed by age groups and sex. The findings are used to raise awareness about the problem among providers and the public at large. In 2001, the number of deaths due to unintentional injuries was higher than in 2002 (53 and 28, respectively). In 2003 and 2004, the number of deaths due to unintentional injuries was similar (30 and 32, respectively). In 2005, very preliminary data from the VS office show 10 children 14 years of age or younger died due to MVC. This rate sharply increased for the 15-24 year old age group. As expected, nonfatal injuries associated with MVC are more frequent than the fatalities. These injuries occur more frequently in the older age groups. The rate for those 14 or younger was 306.8/100,000 and 1,754.8/100,000 for those in the 15-24 age range. Males are more frequently

involved in MVC. The recent popularity motorcycles have experienced has been associated with the increase in MVC.

Reducing unintentional injuries among infants, children and adolescents is one of the 10 priorities of the PR MCH program. In PR several public and private entities work in collaboration through the Safe Kids Coalition to promote the achievement of this performance measure. These include the Police Department, Traffic Safety Commission of the Department of Transportation, Fire Department, PR Coalition for the Prevention of Alcohol Use among Adolescents, Department of Education, EMSC and MCH programs and many other private entities.

For additional information on strategies and activities directed at reducing unintentional injuries please refer to NPM 10.//2007//

/2008/ The MCH Division continues monitoring Vital Statistics data of deaths resulting from unintentional injuries. These deaths are analyzed by age groups and sex. The findings are used to raise awareness about the problem among providers and the public at large. In 2005, VS final data revealed 20 children 14 years of age and younger died due to unintentional injuries. Preliminary vital statistics data for 2006 reported 11 deaths in children of 14 years of age and younger due to unintentional injuries. During 2005 a total of 128 adolescents and young adults aged 15-24 died due to MVC, a rate that sharply increased as compared to 2004 (108 deaths). Preliminary data for 2006 reported 70 deaths in this age group due to MVC.

The Insurance Commissioners Office reported a total of 11,881 children with claims due to nonfatal injuries among children 14 years of age and younger. As expected, nonfatal injuries associated with MVC are more frequent than the fatalities. These injuries occur more frequently in the older age groups. Data from the Administration for Compensation for Car Collision (ACCC) 2006 revealed that the rate of nonfatal injuries for those 14 or younger was 590.8/100,000 and 2,250.0/100,000 for those in the 15-24 age range. Males are more frequently involved in MVC. The recent popularity for motorcycles has been associated with the increase in MVC. Due to increase in number of unintentional injuries and deaths associated with MVC, the MCH Division in collaboration with the State Epidemiologist Office will be establishing a Surveillance System to monitor trends and determine contributing factors associated with unintentional injuries.

Reducing unintentional injuries among infants, children and adolescents is one of the 10 priorities of the PR MCH program. The MCH Division will continue collaborating with public and private entities and the Safe Kids Coalition to promote the achievement of this performance measure.

For additional information on strategies and activities directed at reducing unintentional injuries please refer to NPM 10. //2008//

/2009/ The 2006 VS data revealed 21 children 14 years of age and younger died due to unintentional injuries. This corresponds to a rate of 2.5/100,000. The mortality rate from unintentional injuries due to MVC for this same age group was 1.0/100,000. During 2006 a total of 120 adolescents and young adults aged 15-24 died due to MVC. This corresponds to a death rate of 20.5/100,000.

Data for 2007 provided by the Automobile Accident Compensation Administration revealed the rate of nonfatal injuries for those 14 or younger was 561.1/100,000 and 1,895.3/100,000 for those in the 15-24 age range. Males are more frequently involved in MVC.

The Insurance Commissioner reported 449 children 14 years of age or younger presented claims due to hospitalizations related to nonfatal unintentional injuries.

An injury surveillance system is being established to monitor these events.//2009//

/2007/ HSI 05A & 05B - Chlamydia is the most common bacterial sexually transmitted disease

(STD) and the most commonly reported communicable infection in the United States. Because Chlamydia is primarily an asymptomatic disease, it often goes unnoticed and if left untreated, can cause pelvic inflammatory disease (PID) in women, and result in infertility in both men and women. Recent research in the area suggests that women with Chlamydia are three to four times more likely to contract HIV or other STD infection. The use of preventive health care services and widespread awareness of preventive health guidelines are vital to securing the long-term health of women. Routine Chlamydia screening enables detection of asymptomatic infection, reduction in its prevalence, and reduction in associated results.

In Puerto Rico, Chlamydia is the most common reportable STD among the adolescent population. Its prevalence varies by age group and sex. In 2005, the STDs Surveillance Office reported 3,720 cases of Chlamydia for a rate of 95.0 cases per 100,000 inhabitants. This represents an increment when compared with previous years: 91.7 for 2004, 70.5 in 2003. Over 90.5% of all cases were females, compared to only 9.4% males. The STD Report showed an increase in the number of female cases and a reduction in the male cases. It is important to highlight that 88.7% of all infected women were between 15 and 44 years of age. However, there is no information about the number of infected pregnant women, if any. Females aged 10-14 and 15-19 are 10.8 and 7.3 times respectively more likely to be infected than males. Among females 10-14 years old, the average prevalence is 27.9/100,000, while in males it is 13.9/100,000. The rate increases exponentially in the 15 to 19 years age group. In this age group, females have an average prevalence rate of Chlamydia of 677.7/100,000, while the males have an average rate of 41.1/100,000. For the 20-44 year old population group the rate is 3.2/1,000. The Puerto Rico Department of Health has started using urine tests for Chlamydia detection. The MCH and the STD/Prevention Program expect that by making testing easier to perform, more cases will be detected and referred for treatment.//2007//

/2008/The incidence rate of Chlamydia in Puerto Rico has been increasing, from 70.6 cases/ 100,000 inhabitants in 2000 to 129.9/100,000 in 2006. For 2000-2006 period the number of cases and the incidence rate was greater in women than in men for each year. During the past seven years (2000-2006), the incidence rate was greater in the 20-24 years old group followed by the 15-19 year range, irrespective of gender.

In 2006, the STDs Surveillance Office notified an incidence of 5,104 cases of Chlamydia for a rate of 129.9 cases per 100,000 inhabitants. Of all cases, 80.5% were females, while 19.1% were males. The number of reported cases continue being higher among females 15-44 years old than in men of the same age range. In addition, a noticeable increase is observed in the incidence rate among males in the 15-44 year group in 2006 when compared to those in 2005. The incidence rate among males 15-19 years old had a 225 percent increase. This increment is statistically significant ($P < 0.001$).//2008//

/2009/ In 2007, the STDs Surveillance Office reported 7,734 new cases of Chlamydia for both sexes in the 15-44 years old age range. Of these cases, 87.1% were females, while 12.9% were males. The rate per 1,000 women aged 15-19 with a reported case of Chlamydia was 14.3, while the rate for those in the 20-44 age group was 6.6/100,000. During this same year the rates for males 15-19 was 1.4/1,000 and 1.2/1,000 for those in the 20-44 age group.

There was a 68% increase in the number of new cases in females 15-19 years of age and a 65% increase among those in the 20-44 year category when compared with 2006 data. The increase may be due to the aggressive search of cases using urine samples in students.//2009//

/2007/HSI 06A & 06B - According to the Census Bureau, in 2000, 1,219,804 children and adolescents aged 0-19 years lived in PR. This figure represents 32% of the overall population in Puerto Rico. However, the size of all child and adolescent groups declined 5.3% from 1980-2000. This decline may be explained by the reduction of the natality rate in PR during the last decade

and the increased migration of Puerto Rican WCBA to the U.S. In Puerto Rico, the birth certificates does not include an item to identify maternal place of origin, although it records the mothers' birthplace. Currently, we use maternal birthplace to classify women as Puerto Rican. Preliminary VS data for 2005 includes only 37,110 births. Among them, 36,017 (85.8%) infants were born to women whose birthplace was Puerto Rico, 1,051 (2.8%) had mothers whose birthplace was the Dominican Republic and 4,213 (11.4%) were born to women of other nationalities. The vast majority of the population is Hispanic and speaks Spanish. The largest group is in the 10-14 age range, followed in descending order by those in the 15-19, 5-9 and the 0-4 groups.//2007//

/2008/ According to the population estimates of the Census Bureau, in 2006, 1,135,559 children and adolescents aged 0-19 years lived in PR compared to 1,219,804 young population in 2000. This figure represents 28.9% of the overall population in Puerto Rico. However, the size of all child and adolescent groups declined 2% from 2000-2006. This decline may be explained by the reduction of the natality rate in PR during the last decade and the increased migration of Puerto Rican WCBA to the U.S.

In Puerto Rico, the revised birth certificates began in 2005. This certificate includes ethnicity origin for the mother and the father. The VS data for 2005 includes 50,687 births and, preliminary data for 2006 only reports 30,890 live births. Among the infants born in 2006, 26,791 (86.7%) infants were born to women whose ethnicity was Puerto Rico, 1,216 (3.9%) had mothers whose ethnicity was New York and 769 (2.5%) report their ethnicity as Dominican Republic. About 2,114 (5.3%) reported other ethnicity. The vast majority of the population is Hispanic (91.6%) and speaks Spanish (95.3%) according to the birth file and the PR Community Survey. //2008//

/2009/ In 2007, an estimated 1,408,187 persons ages 0-24 lived in PR. This group represented 35.7% of the population. The 0 to 19 years subgroup represented 28.4% of the PR population (1,121,697). Comparing 2006 to 2007, major declines in population occurred in the following age groups: 0-4yrs (2.8%); 5-9 yrs (1.7%); and 20-24 yrs (1.2%).

Comparing the 2006 population data to 2007 revealed a slight decrease of 1.2% in population aged 0 to 19 years and 1.3% for people between 20 to 24 years. The natural growth in PR continues to decrease as consequence of the decreasing natality rates.

PR residents are overwhelmingly Hispanic (98.7%) and speak the Spanish language (95.2%). The second largest group are those born to mothers from NY (3.7%) and 2.8% from Dominican Republic.//2009//

/2007/ HSI 07A & 07B - The occurrence of many diseases, injuries, and other public health problems varies across different age groups and some are disproportionately higher in racial/ethnic minority populations in the United States. The collection of information by age groups and by race and ethnicity has been an important component of public health surveillance efforts used to identify differences in health status among different groups.

The 2000 Census was the first census in Puerto Rico since 1950 to include questions about race or ethnicity. For people in Puerto Rico, as well as Hispanics/Latinos living in the United States, race is a flexible concept. This is evident in a comparison of race responses between people living in Puerto Rico and Puerto Ricans living in the United States. Although the groups share the same heritage, they have very different ideas about racial identity. About 81% of people in Puerto Rico identified themselves as white in the 2000 Census, but Puerto Ricans residing in the United States were almost equally likely to say they were white (46%) as "some other race" (47%). The most significant ethnic groups residing on the Island are Dominicans and Cubans. Most Dominicans are concentrated in the metropolitan areas close to San Juan. A significant number of Dominicans are undocumented. In 1998, the U.S. Immigration Agency reported 7,540 new lawful permanent residents' aliens and approximately 37,700 illegal residents in the Island. Puerto Ricans, Dominicans and Cubans have a Hispanic background.

The 2000 Census revealed the following ethnic composition in PR: 95.1% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.2% was classified as Asian, Native Hawaiian and other Pacific Islander. In 2004, almost 90% of the births were among Hispanic/Latino women, the majority Puerto Ricans. Preliminary Vital Statistics data reveal the birth rate for teens 15 to 17 years of age in 2005 was 28.6 per 1,000 and 0.9 per 1,000 for teens in the 10 to 14 age group. Women 35 years or older had a birth rate of 10.6/1,000. //2007//

/2008/ About 76% of people in PR identified themselves as white in the 2005 Puerto Rico Community Survey Census. This survey revealed the following ethnic compositions in PR: 95% Puerto Ricans, 0.5% Cubans, 0.3% Mexican and 2.8% other Hispanic or Latino. Only 0.1% was classified as Asian, Native Hawaiian and other Pacific Islander.

In 2005, almost 90% of the births were among Hispanic/Latino women, the majority Puerto Ricans (85.6%), as well as preliminary data for 2006 that shows almost 92% of births were among Hispanic/Latino women, most of them Puerto Ricans (88%). Preliminary 2006 Vital Statistics data revealed the birth rate for teens 15 to 17 years of age to be 24 per 1,000 and 0.8 per 1,000 for teens in the 10 to 14 age group. Women 35 years or older had a birth rate of 6.1/1,000. //2008//

/2009/ No significant changes noted.//2009//

/2007/ HSI 08A & 08B - In terms of infant mortality, the target for the infant mortality rate set by HP 2010 is that no more than 4.5 deaths per thousand live births should occur in any population group or geographical area. In 2005, the preliminary data on infant mortality rate was 8.9/1,000 live births, which is higher than the rate in 2004 (8.1/1,000 LB). These data show that the current infant mortality rate in the Island is higher that the U.S. mainland and two times above the set target for the 2010. This is a significant disparity between what has been achieved on this important health outcome and the expected.

Preliminary VS data for 2005 reported 335 infant deaths. Among them, 285 (85.1%) were born to Puerto Rican women, 39 (2.7%) to women from the Dominican Republic and 11 (3.3%) of other nationalities.

When we analyze the mortality rates for the pediatric population we find that it has been decreasing during the past decade. In 2005, the death rate in the age group 1-14 was 9.6/100,000 vs. 16.9/100,000 in 2004. However, this is a very preliminary report since VS office has experienced a significant delay in entering the death reports into the information system. We expect this rate will change when the VS report is final. The leading causes of death were unintentional injuries, congenital anomalies and malignant tumors. In 2005, 22 deaths were reported among children aged 5-9. The leading causes of death were (1) unintentional injuries, (2) diseases of the respiratory system (3) diseases of the nervous system. It is important to note that aside from unintentional injuries, some of the other causes of death can be traced back to conditions originating during the perinatal period. In the group of adolescents 10-14 years we found that during the period between 1990-2002 the mortality rate fluctuated between 16.7 (2000) and 29.3 per 100,000 (1995), with an average of 23.1. Preliminary data for 2005 reveals a total of 30 deaths in this group of age. The leading causes of deaths among them were: unintentional injuries, infectious and parasitic diseases, neoplasm's, and diseases of the nervous and respiratory systems. For the adolescent group of 15-19 years, the death rate in 2004 was 71.8/100,000. Preliminary data for 2005 suggests a death rate of 41.7/100,000. The leading causes of death were homicide, unintentional injuries, and malignant tumors. Finally, the death rates for the young adult population (20-24 years) were 94.7/100,000 in 2004 and 145.7/100,000 in 2005 (preliminary data). The most frequent causes of death in this age group were homicides and unintentional injuries, followed by suicides. However, the 2005 data will change after the Vital Statistics Office completes the death certificate data entry and verification process. //2007//

/2008/In 2006, the preliminary data on infant mortality rate was 9.3/1,000 live births, which is similar to the rate of 2005 (final data), 9.3/1,000 live births. The SSDI Descriptive Study of Infant Mortality 2000-2003 revealed that the infant mortality rate in Puerto Rico is higher among GIP participants than those with other health insurance (10.6 vs. 7.1 deaths per 1,000 live births). Another important source of information is the Infant Mortality Committee. A delegate of the Secretary of the Department of Health (MCH Director), a delegate of the Department of Family, a Demographer, a Statistician, a Pediatrician, a Neonatologist, a delegate from the Department of Education, a delegate from ASES, a Forensic Pathologist and a Nutritionist conform the committee. This committee holds meetings with the objective of identifying risk factors that affect the infant mortality rates in order to prepare a plan of action. In addition, members of this committee contribute by disseminating information to health professionals and the general population, regarding infant mortality and the indicators related to decreasing infant mortality rates. Final Vital Statistics (VS) data for 2005 reported 469 infant deaths. Preliminary Vital Statistics data for 2006 reported 288 infant deaths. Among them, 252 (88.0%) were born to Puerto Rican women, 23 (8.0%) to women from the US mainland, 9 (3.1%) from Dominican Republic and the rest from other nationalities.

In terms of the pediatric population, preliminary data for 2006 indicates that the death rate in the age group 1-14 was 7.3/100,000. The leading causes of death were: (1) unintentional injuries, (2) diseases of the nervous system, and congenital anomalies. In the age group of 5-9, 13 deaths were reported. The leading causes of death were: (1) congenital anomalies, (2) diseases of the nervous system, (3) neoplasm's. Preliminary data for 2006 reveals a total of 22 deaths in the age group of 10-14. The leading causes of deaths among them were: (1) unintentional injuries, (2) neoplasm's. For the adolescent group of 15-19 years the death rate for 2006 was 38.1/100,000. The leading causes of death were homicides, unintentional injuries and malignant tumors.

Finally, the death rate for the young adult population (20-24 years) was 88.6/100,000 in 2006 preliminary data. The most frequent causes of death in this age group were homicides and unintentional injuries, followed by suicides. The Department of Health, through the Epidemiologist Office, is in the planning phase of implementing an Injury and Suicide Surveillance System as well as the implementation of aggressive interventions to prevent homicides and suicides. The MCH Division will collaborate with this initiative. Also appropriates techniques to manage conflicts and decrease violence among this young adult population will be established.//2008//

/2009/ The 2006 IMR is 8.7 per 1,000 live births, a reduction from the 2005 reported rate of 9.3/1,000 live births. However, it still needs to be reduced further to reach the HP 2010 objective of 6.2. LBW/Prematurity and congenital anomalies remain the main causes of IM. A Fetal and Infant Mortality Review (FIMR) pilot project is being implemented in the area with the highest IM rate. The PTF, FIMR and the IM Committee are working to identify additional contributing risk factors.

The 2006 VS data indicates the death rate in the 1-14 age group was 11.9/100,000. The leading causes of death were: (1) unintentional injuries, (2) neoplasms, and (3) diseases of the nervous system (CNS). In the age group of 5-9, 20 deaths were reported for a rate of 7.0/100,000. The leading causes of death were: (1) diseases of the CNS, (2) neoplasms (3) congenital anomalies. A total of 34 deaths were reported in the 10-14 age group. Their rate was 11.2/100,000. The leading causes of deaths among them were: (1) unintentional injuries (2) neoplasms, (3) diseases of the CNS. For those 15-19 years of age the death rate was 66.1/100,000. The leading causes of death were homicides and unintentional injuries followed by neoplasms.

Finally, the death rate for the young adult population (20-24 years) was 144.41/100,000. The most frequent causes of death in this age group were homicides and unintentional injuries, followed by suicides. //2009//

/2007/ HSI 09A & 09B, 10, 11, 12 - The health situation of the population can be affected by

social, environmental, behavioral, as well as economic determinants. Specific health situation analysis is made using two types of health indicators (perceived health and objective health) and their relation to health determinants present in each population. Adverse health outcomes disproportionately affect infants and children in foster care or in single parent homes. In 1995, 14 million infants and children aged 0 through 18 years lived below the Federal poverty level in the United States; 59% of these families were single parent families.

According to the information provided by the US Census Bureau, the total population in Puerto Rico in 2000 was 3,808,610 inhabitants. Based on this figure, the population density is estimated at an average of 1,080 persons per square mile. However, some metropolitan areas may have close to 10,000 persons per square mile. There were 1,261,321 households, of which 27% were single-parent, female-headed families with children under 18. Seventy-one percent of these female-headed families were living below the federal poverty level, compared to 44% of families of married couples.

According to the 2000 Census, half of the population (50.5%) corresponds to the MCH population groups. These include 1,219,804 (32%) children and adolescents up to 19 years old; and 701,871 (18.5%) women between 20-44 years. The median age of the population was 32.1 years, compared to 28.4 years in 1990.

Based on the US Census Bureau projection, in 2005 the total population was estimated at 3,911,299. The MCH population represented 54.1%. Specifically, 29.4% were children and adolescents (1,149,039), and 18.0% were women in reproductive age (20-44 years).

In terms of other determinants of health, educational or literacy levels are mentioned by World Health Organization (WHO) as one of the socioeconomic factors that can affect the health situation of the population. In terms of its relevance for our youth population, it is known that leaving high school before graduation can lead to continued poverty and a higher incidence of juvenile arrests. In Puerto Rico, the percentage of high school drop outs for 2004 was 1.3, but the rate of juvenile crime arrests was 1,266.9 per 100,000 for the same year. //2007//

/2008/ The health situation of a population can be affected by social, environmental, behavioral, as well as economic determinants. The analysis of a specific health situation is made using two types of health indicators (perceived health and objective health) and their relation to existing health determinants among the population. Adverse health outcomes disproportionately affect infants and children in foster care or in single parent homes. According to 2005 Puerto Rico Community Survey, 55% of children under 18 were below the poverty level. Forty-one percent of all families and 58% of families with a female householder and no husband present had incomes below the poverty level.

According to the information provided by the US Census Bureau, the total estimated population in Puerto Rico for 2006 was 3,927,776 inhabitants. For 2000, the population density is estimated at an average of 1,080 persons per square mile. However, some metropolitan areas may have close to 10,000 persons per square mile. In 2005, there were 1,254,318 households and the average household size was 3.1 people. Families made up to 76 percent of the households in Puerto Rico. This figure includes both married-couple families (48%) and single-parent (28%). Sixty-eight percent of these female-headed families with children under 18 years were living below the federal poverty level, compared to 49% of families of married couples.

According to the 2006 population estimates of the US Census, 46.5% of the population corresponds to the MCH population groups. These include 1,135,559 (28.9%) children and adolescents up to 19 years old; and 703,727 (17.9%) women between 20-44 years. The median age of the population was 34.7 years, compared to 32.1 years in 2000.

In terms of other determinants of health, educational or literacy levels are mentioned by the World Health Organization (WHO) as one of the socioeconomic factors that can affect the health

situation of the population. In terms of its relevance for our youth population, it is known that leaving high school before graduation can lead to continued poverty and a higher incidence of juvenile arrests. According to the Puerto Rico Community Survey, US Census Bureau, in 2005, 66 percent of individuals 25 years and over had at least graduated from high school and 21 percent had a bachelor's degree or higher. The total school enrollment for pre-school and kindergarten was 122,000 and elementary or high school enrollment was 729,000 children. Among adolescent 16 to 19 years old, 11% were school dropouts, meaning they were not enrolled in school and had not graduated from high school. In Puerto Rico for 2004 the rate of juvenile crime arrests was 1,266.9 per 100,000 inhabitants. //2008//

/2009/ About 28.4% (1,135,087) of the 2006 population were infants and children 0-19. The percent of children under 18 years below poverty level continues to increase, reaching 56.3%. The 2006 PRCS reported 42% of all families and 60% of families with a female householder and no husband present had incomes below the FPL. These numbers evidence a slight increase when compared with 2005.

For 2007, the Medicaid and SCHIP enrollments decreased 1.2% compared with 2006. The number of infants and children enrolled in WIC Program also revealed a decline of 1.1%. The number enrolled in food stamp program showed a significant reduction of 28.1% between 2006 and 2007.

PR population density increased 6.2% when compared to 2000, reaching an average of 1,147 persons per square mile. Fifty-six percent (56%) of children under 18 years and below poverty level lived in metropolitan statistical areas.

The rate of juvenile crime arrest in 2007 was 2,464.3/100,000 habitants, 23.5 points less than in 2006. The reported percentage of high school dropouts (grade 9 through 12) remain less than 1% (0.4% in 2005 and .99% in 2006).//2009//

F. Other Program Activities

/2009/ DIRECT SERVICES
****The Pediatrics Centers served 7,885 CSHCN during FY 2006-2007.***

****The MCH Division provides contraceptives to WCBA who are covered by the Government Insurance Plan. During FY 2006-2007, the MCH Division was able to provide 27,099 unduplicated WCBA contraceptives methods. A total of 84,439 contraceptives methods were distributed. We also provide participants of the Health Care Reform the prenatal Rhogam vaccine recommended at 28 weeks gestation for Rh negative non-sensitized pregnant women. During this same period, 2,032 Rhogam vaccines were provided.***

ENABLING SERVICES
****The Toll-Free Line of the PRDoH (1-800-981-5721), required by law, provides information about accessibility of health care and other services to the population. This service is contracted by Data Voice Solutions. Since the establishment of the Health Care Reform, the Health Insurance Administration (ASES) and all health insurance companies under contract are obliged to run a toll-free line (TFL) for their beneficiaries. Several Toll-Free lines are available at this moment for clients and service providers:***

ASES: 1-800-981-2737
Triple C: 1-800-981-1352 and 1-800-255-4375
MCS: 1-800-981-2554
Humana: 1-800-790-7305
Patients' Advocate Office: 1-800-981-0031

The CSHCN program received 137 calls in the toll-free line during 2007. APNI reported 510 toll-free telephone calls requesting orientations in 2007. The Data Voice Hotline received 646 calls.

****The Sexual Assault Victim Center (CAVV) reported a total of 108 information calls to the MCH social worker during this reporting period.***

POPULATION BASED
****A total of 21,961 educational activities on MCH topics were provided by the Regional MCH staff reaching 299,083 persons. Our personnel participated in 46 radio programs in which a wide array of MCH topics was covered. We also took part in 535 activities which included health fairs, educational booths and multiphase clinics. A total of 40,040 persons benefited from these activities. The MCH Program Coordinator was a presenter in the local Pediatric Convention and PR AAP Chapter Annual Forum.***

****During 2007, the Local Healthy Start Project Participants' Committees (24) held 68 meetings where 928 persons participated. The HS Consortium met 4 times, while the Executive Branch of the Consortium held 2 meetings.***

****The Sexual Assault Victim Center (CAVV) reported a total of 824 educational activities reaching 26,553 participants island wide, among them health professionals, students, parents and general public. A total of 87 of theses activities were training sessions for 4,660 health professionals. The CAVV staff also participated in 14 radio and 8 TV programs.***

****During FY 2006-2007, the PR-EMSC Program reported 9 educational activities where 1,115 persons participated, and provided 14 training activities reaching 539 health professionals. The Program also participated in a TV program and held one press conference to promote toy safety.***

****APNI carried out a series of activities for families of CSHCN, including an annual conference reaching 812 participants; workshops offered to 2,946 participants; and telephone and in-person family orientations to 545 persons.***

****Seven MCH staff were trained by the Department of the Family Peace Promoters Program on techniques to effectively deal with anxiety, depression, violence and solve conflicts peacefully.***

****During FY 2006-07, the Naranjito Adolescent Program reached 4,510 participants by conducting 101 educational sessions, 136 individual orientations, 100 family counseling and other community level activities.***

****The Latino Family Institute of California offered 4 training sessions to 85 persons on the topic of adoption.***

INFRASTRUCTURE BUILDING
An ongoing needs assessment, data analysis, TA, training and other activities, such as the development and dissemination of the Integrated Index of MCH by Municipality are performed annually.

****Four Region II HRSA grantees participated in the OPR State Strategic Partnership Session in October 2007 with the participation of MCH Title V, PCO, PCA and Ryan White Part B Program. The focus area selected was access to health services for patients living with HIV/AIDS. Three workgroups were established to improve their access to care: access to medications, access to medical services and communications. The main strategies selected were: establishing a Pharmacy Benefit Manager for the entire AIDS Drug***

Assistance Program (ADAP) clientele, restoration of the Regional Immunology Clinics infrastructure, A Quality Improvement Initiative and a communication plan to disseminate the HIV Governor's Plan.

****A total of 30 MCH staff members were trained in topics related to emergency alertness by the Office of Public Health Preparedness and Response of the DoH. They will help MCH actively participate during a disaster and assist the MCH population. We have been formally included in the DoH Incident Command Structure. Our MCH response plan is one of the Attachments in the DoH Emergency Response Plan. Our Division submitted a COOP plan and was actively involved in a full scale Point of Distribution Exercise and a Table Top exercise on school closings during a flu pandemic.***

****The MCH personnel provided 4 training activities to 223 regional staff about Law 177.***

****The Rotary Club of Puerto Rico has adopted Infant Mortality as a focus area for its community activities in 2008-2009. Two representatives joined the PR Healthy Start Consortium in 2007. Through this partnership, the Rotary Club has offered to sponsor educational activities directed at our participants and the community, allow us the use of their meeting facilities, and collaborate with our efforts directed at improving infant health.***

****The MCH Division received a TA by a Senior CDC Epidemiologist and the PR MCH Title V proposal reviewer.***

****The PR ECCS Project is implementing its state plan to improve the health and wellbeing of children 0-5. They are currently focusing on developing and integrating the mental health component in services provided to young children.***

****PR is participating in the ABCD Screening Academy. This initiative is actively promoting the use of the ASQ developmental screening tool in two 330 centers and one community health center as a first step toward promoting the adoption of the MH concept. The CSHCNP and ECCSP continue developing medical homes pilot projects for CSHCN.***

****The MCH staff participated in the efforts to adapt the pediatric US food pyramid to local cultural practices and food preferences.***

****The Needs Assessment for Persons with Autism Spectrum Disorders was completed in September 2007. The results will guide the development of public policy by the PRDoH.***

****The PR Department of the Family requested a TA from our MCH Division to replicate our HVP model as a preventive strategy for domestic violence. A cooperative agreement was prepared and trainings offered.***

****A midterm PR HP 2010 progress report was prepared. We updated the MCH Health Status Chapter for a PAHO report.***

****During the Annual Epidemiology Conference, MCH participated with 6 oral presentations.***

****The MCH Division has suggested public policies recommendations on 73 proposed legislative bills and joint resolutions related to maternal and child health issues. As of April 2008, 12 of them were vetoed and 5 have been approved. We are endorsing Senate Bill 2080, whose main goal is to establish the early childhood public policy in PR.***

****The CSHCNS continues its active participation in the Alliance for Full Participation. The Committee reviewed the Bill of Rights of Persons with Disabilities (PL# 238, 2004); recommendations for amendments were submitted to the Legislature.//2009//***

G. Technical Assistance

The new Guidance set for the Title V Application and Annual Report requires that States report progress in achieving the established annual performance indicator for each of the 18 National Performance Measures, all the State Negotiated PMs (9 in PR), 11 HSCIs and other health status and sociodemographic indicators and 6 outcome measures. This is great challenge for those jurisdictions with limited resources and which at the same time are left out of national surveys that provide the data for some of the PMs. The latest example of a survey which did not consider the needs of the jurisdictions is the SLAITS. This survey will help the States by providing the data to monitor some of the PMs concerning the CSHCN population. However, the jurisdictions must report progress on performance measures #02, #03, #04, #05 and #6 even though they were not included in the SLAITS.

Currently, the PR CSHCN program does not have the needed data to monitor the progress of the five national performance measures mentioned earlier. There are no data for either the denominator nor the numerator of these performance measures.

Since in 2005-2006 states and jurisdictions will have to perform the comprehensive and mandated 5 year needs assessment, a TA concerning the needs assessment of the population of CSHCN is desperately needed. Some of the questions that need to be answered for the CSHCN include:

1. How many children with special health care needs are there in the Island?
2. What is the distribution by age group?
3. What are the most prevalent conditions?
4. In which geographical areas do these children live?
5. What services are available for them and where?
6. How many providers are there according to identified prevalent conditions, and where do they practice across the Island?
7. Others.

Initial conversations with Dr. Michael Kogan have already taken place on Puerto Rico's need to collect pertinent data for CSHCN. The Division of Habilitative Services firmly believes it is necessary to request TA for this endeavor in order to be successful.

The TA should be geared to assist us in designing the most appropriate process to gather the needed information to answer the aforementioned questions, what are the minimal resources needed to carry out the task and to obtain reliable and useful data.

Therefore we request that our MCHB Project Officer come to PR, gain knowledge of our service delivery system and recommend the appropriate MCH staff person to assist us in the process of developing, adapting, testing and administering the Spanish SLAITS CSHCN survey to the general population.

Technical assistance also is being requested to assist the Title V CSHCN Program in the planning and development phases of a comprehensive strategic transition plan partnering with all stakeholders to comply with the NPM#6.

/2007/ The Habilitation Section, along with the staff of the MCH Division, will establish a collaborative effort to develop a questionnaire based on the CSHCN SLAITS Spanish version. Questions pertinent to NPM 2-6 will be evaluated for inclusion and others will be added to make it culturally and linguistically appropriate. In addition, PR has identified the need to collect data on the prevalence of CSHCN conditions island wide and by municipality, as well as the socio-demographic data for this population. This information will be collected using either the SLAITS or another instrument designed by the MCH Monitoring, Evaluation, Investigation Section

established by Administrative Order No. 207.

The Title V Application and Annual Report requires that states report their progress towards achieving the established annual objectives for Health Status Indicators (HSI) and Health System Capacity Indicators (HSCI). One of the data sources used for this purpose is the Hospital Discharge Survey. It provides data for HSI 4A: the rate of non fatal injuries in children of 14 years of age and older; HSCI 01: the rate of hospitalizations among children 0-4 years due to bronchial asthma; and HSCI 9A: the ability of the MCH program to obtain data for program planning or policy purpose in a timely manner. The Hospital Discharge Survey is conducted annually by the National Center for Health Statistics, and collects medical and demographic information from a sample of discharge records selected from a sample of hospitals. The data collected serve as a basis for calculating statistics on hospital utilization related with preventable conditions such as those described above.

Reporting data on these indicators is a great challenge for territories and jurisdictions with limited resources that do not participate in these national surveys. In order to obtain quality and timely data needed to report on these HIS and HSCI, the Puerto Rico Department of Health is requesting a technical assistance. It will allow us to initiate the planning phase for the PR Hospital Discharge Survey Project. During this phase we will adapt and customize the survey to our local needs and language specifications. Being able to have key personnel from the National Center for Health Statistics assist the MCH Division Monitoring and Evaluation Section during this phase will increase our ability to have data to monitor our progress toward improving the health and wellbeing of our target population. We intend to submit a formal request for this technical assistance and begin our planning phase during this current budget year.//2007//

/2008/ The Home Visiting Program is one of the core services offered by the Puerto Rico Title V Program. Its target population consists of pregnant women, women in the inter conceptional period up to 24 months after birth, and children up to 2 years of age with complex health and social problems. During calendar year 2005, 103 Home Visiting Nurses (HVNs) provided services in 74 out of 78 municipalities (95% coverage) and 81 Community Health Workers (CHWs) were assigned to 63 municipalities.

The HVNs and CHWs participated in various continuing education activities sponsored by the PR Health Start Project and the Title V Program to develop their professional capacity to deliver quality services to the population. According to Healthy Start guidelines, emphasis is given to increasing the use of preventive services, including early admission to prenatal care, regular pediatric and women's health visits to primary providers, and adequate immunizations; screening for behavioral risk factors and maternal depression and addressing women who are at risk or engaging in risk behaviors through educational interventions by the HVNs or referrals to treatment services available in the community, among others.

The main goal of the Home Visiting Program (HVP) is to improve birth outcomes by promoting the utilization of preventive services and prenatal care through education, counseling and case management in Puerto Rico.

The Home Visiting Program developed two quasi-experimental studies assessing the impact of the HVP on a group of pregnant HVP participants. One was conducted in 2001 comparing birth outcomes of HVP participants (n=1,052) with a no-intervention equivalent control group (n=1,052) matched by age, educational level and source of payment for health services. A similar evaluation was performed in 1999-2000 studying two groups of women (2,215 HVP participants and 2,215 controls) matched by age, marital status, educational level and income.

The findings of the study suggested that prenatal care and birth outcomes in participants and controls are similar, although participants begin their pregnancy with more risk factors than the controls. Based on that information, we can infer that the HVP is helping our participants to achieve a more reasonable prenatal care improving their chances for a better birth outcome.

The MCH Program wants to replicate the study to evaluate the impact and effectiveness of the HVP. Therefore, technical assistance is requested to assess the method of the evaluation plan and to give recommendations.

Historically, C/S rates in Puerto Rico have been higher than those in the mainland USA. A descriptive study was carried out to provide updated information to concerned individuals and organizations to generate discussion regarding the possible causes that lead to the increased use of this method in Puerto Rico.

Stratified analyses from linked birth and death files provided by the State Vital Statistics Office were performed using the most relevant data available to describe the picture and to generate hypotheses regarding the problem. This study has been used to raise general awareness of the problem among OB/GYN specialist and the Association of Hospitals to help them develop policy and practices aimed at reducing C/S in Puerto Rico.

A C/S Evaluation Committee was created with the objective of analyzing the findings of the study conducted by the MCH staff. The Committee generated a list of medical and non-medical reasons that may lead to a C/S. In order to prove or reject each of the above reasons, two other studies have been conducted. A chart audit of a representative sample of 560 cases of C/S in 1999 was performed in 2002. This study did not prove that the high rate of C/S could be explained by the existence of medical conditions; at least, the evidence was not found in the evaluation of the vital files nor hospital records.

The other study recommended by the C/S Committee was a survey of women subjected to C/S. From July 2004 to February 2005, the MCH staff conducted a study looking at primary data from the perspective of the mother that may help explain the high and increasing rates of C/S in Puerto Rico. The study looked for associations between attitudes and experiences of the woman and the characteristics of the physician in the decision making to deliver by C/S. The methodology consisted of a self-administered questionnaire that collected socio-demographic data, medical history, and prenatal care utilization, experiences before and during pregnancy, delivery information, newborn data, and the mother's opinion about the type of delivery. The magnitude and significance of the association (OR) between cesarean delivery and the influence of the woman and the characteristics of the physician was determined by a Multinomial Regression Model. After adjusting by confounding variables, the risk of having a cesarean delivery increases when the birth is attended by a male obstetrician (OR=2.02; p=0.04). Although there was no evidence of statistical significance (p>0.05), there was an excess risk of having a cesarean delivery if the pregnancy was unintended (OR=1.50), the mother had a negative experience during pregnancy (OR=1.77), or the mother had concerns during pregnancy (OR=1.55).

Still, in 2005 the C/S rate was 48.1%, almost two times the expected rate according to the Puerto Rico's Healthy People Objectives (26.5%). The MCH Program requires assistance to design a more profound study that will help identify the main factors for the increasing rates of C/S in Puerto Rico. Furthermore, the identification of new strategies for decreasing this birthing method is also needed. //2008//

/2009/ PR has the highest PTB in the nation. In 2007 the MCH Division joined the Puerto Rico Prematurity Taskforce (PRPT) with the purpose of identifying local risk factors that may be contributing to this elevated rate and to develop a feasible strategy that could lead to improve this health indicator. The PRPT closely analyzed VS data from 1990 to 2004 to identify risk factors that could explain the phenomenon. Unfortunately our results failed to directly point at any of the usual factors such as maternal age, education and lifestyle, prenatal care and method of birth as the explanation for it. We are currently in the process of conducting focus groups with mothers of premature infants in order to identify common factors that may shed additional light into the issue and help us direct and focus our future investigations.

Since premature and LBW births are the leading cause for IM in PR, determining preventable or modifiable risk factors for PTB is one of our biggest challenges and one of our greatest priorities. Due to the severity of the problem we would like to expedite if possible the identification of contributing factors. Therefore the MCH Division is requesting a TA to help us further evaluate this situation and identify those risk factors we can reduce or eliminate to the PTB rate in PR.//2009//

V. Budget Narrative

A. Expenditures

/2007/ Completion of Budget Forms
Please refer to budget columns of Form 2, Form 3, Form 4 and Form 5 for FY 2004-2005.
Estimates had to be used in providing budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered accordingly to the pyramids levels. Adjustments have been made progressively to the budgeted funds to reflect the behaviors of the accounts during the past years. //2007//

/2008/ Completion of Budget Forms
Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2005-2006.
Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels. Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years. //2008//

/2009/ Completion of Budget Forms
Please refer to budget columns of Forms 2, 3, 4 and 5 of FY 2006-2007.
Estimates were used in order to provide budget and expenditure details. Breakdown of expenditures by type of services is a very difficult task when we try to assess the performance of a public health professional. This task is quite easy at the first level of the pyramid related to direct services. At this level, we know who serves the different groups of the MCH population and the amount of time dedicated to each of the subgroups, allowing us to determine the expenditures by type of individuals served. But trying to estimate the amount of time dedicated to each of the subgroups comprising the MCH population, as well as the time dedicated to perform enabling, population-based or infrastructure building services, is not an easy task. For this reason, estimates had to be made and this may lead to discrepancies between the budgeted and the expended figures by levels of the pyramid. The expended columns reflect the real expenditures registered according to the pyramid levels. Adjustments have been made progressively to the budgeted funds to reflect the behavior of the expenses in the accounts of previous years.//2009//

B. Budget

/2009/ Program allocations have taken into account the 30-30-30-10 requirements established by Title V. Efforts are made to match funds according to the identified needs through the four levels of the MCH pyramid, as well as the three groups of individuals that comprise the target population.

Puerto Rico assures that the MCH funds are used for the purposes outlined in the Title V, Section 505 of the Social Security Act. Traditionally, a fair method has been used to allocate Title V funds among individuals and geographic areas having unmet needs. The fair allocation of funds is guided by an Integrated Index of Maternal and Infant Health Status (IIMIHS) developed by the MCH Division to assess the health needs of the target population by municipality (Table II-1). One of the benefits of using this Index is that the information necessary to evaluate each of its variables is available on an ongoing basis through analysis of birth and death files. The Division of CSHCN allocates Title V funds guided by the needs assessment's findings and the national and state performance measures.

A total of 35% of Title V Block Grant Funds is allocated for the CSHCN program. Fifty-nine percent (59%) of funds are allocated in the Direct Service Pyramid Level. This includes salaries and benefits of the staff, specialists and subspecialists professionals' service contracts, special formulas, devices and Central level MCH Staff. The other five percent (5%) is used to cover the administrative costs for the central level and the seven Pediatric Centers.

As of December 2007, the MCH Division has 93 Home Visiting Nurses, 72 Community Health Workers, nine Perinatal Nurses and four Health Educators across the Island. At the regional level we have eight teams. Most teams are comprised of the regional MCH director, coordinator of maternal and infant health services, coordinator of preventive services for children, coordinator of adolescent health services, and administrative support staff. At the central level we have 26 regular positions and 7 contracts. Contract positions paid with Title V funds include a Biostatistician, one Epidemiologist, one Evaluator, one Anthropologist, two Physicians and one Genetic Counselor.

At Central level, the CSHCN Section has a total of 20 positions: 16 regular positions and four contracts. Contract positions include: an Evaluator, an Information System Administrator, and two Epidemiologists, one for the CSHCN Title V Program and other for the Autism Project. At Regional Level, the CSHCN Section has a total of 139 positions: 104 regular positions and 35 contracts. In total, 159 positions are paid by Title V funds.

Allocations by Levels of the Pyramid:

Direct Services: Previously, the MCH funds were assigned to the purchase of contraceptive methods to support the family planning services rendered through the health care reform for women holding the GIP. This service provided by MCH has been affected by the reduction of funds, the increase in costs of contraceptive methods, the legislated salary raise for nurses and the PRDoH Personnel Reclassification Plan implemented in July 2007. Even though family planning services, including sterilization of males and females, are included in the GIP, contraceptive methods are not included in the benefit package.

The needs of CSHCN identified through the needs assessment support our efforts to make specialized services available through the Pediatric Centers. The Metropolitan Area Pediatric Center, administratively under the Pediatric University Hospital for the past ten years, remains a supra tertiary referral center and provides services not available at the regions for children and families referred by the other six Pediatric Centers. The Metropolitan Area Center offers a wide variety of sub-specialized services to our population. This includes the salaries of the seven Pediatric Centers including medical

specialists, subspecialists and allied health professionals, as well as special formulas for CSHCN over 5 years of age with metabolic disorders. Prosthetic and orthotic devices are partially funded according to payment capacity as determined by the Medical Assistance Office.

Enabling Services: A significant amount of Title V funds from this level is needed to support salaries, local travel and uniforms expenses for the 93 Home Visiting Nurses and 9 perinatal nurses. The HVNs are specially trained public health nurses who provide health education and coordinate services through referrals to the appropriate private and public entities in their communities. At this pyramid level funds are allotted to cover expenses for the Toll-Free Information Line to disseminate the services provided by CSHCN and MCH, and for an additional information line about services available at the Pediatric Centers. Also, part of these funds is set aside to support a community based organization that promotes adolescent health.

Eight (8) registered nurses and one (1) social worker provide care coordination services to CSHCN at the Pediatric Centers. Four (4) of these are paid with Title V funds and are included in this level; the other five (5) are paid with state funds.

Population-Based Services: Title V funds are used to maintain the NTD prevention campaign, folic acid consumption campaign, injury prevention, and the salaries and local travel expenses of the health educators. These funds are also used to purchase educational materials according to the performance measures and incentives that promote the toll-free line and convey a wide array of health promotion messages. The salaries for the staff of the Comprehensive Adolescent Health Program (SISA), including a physician and the social workers are assigned to this pyramid level. The 73 Community Health Workers in the eight regions as well as their local travel expenses are allocated at this level. The Community Health Workers have the responsibility to identify pregnant women and children outside the health care system and facilitate their enrollment in the GIP, as well as providing educational activities at the community level.

Infrastructure Building Services: To sustain the infrastructure of MCH/CSHCN programs, funds are used for the salaries of central and regional administrative staff. This area developed in the MCH Division is comprised by a team of skilled public health professionals including a Biostatistician, Epidemiologists, and Evaluators, among others. Funds are also invested for the needs assessment and other core functions, equipment, professional development, the purchase of computers, e-mail and informatics system maintenance, support for applied research and surveillance. All travel expenses required to attend meetings, conferences and trainings in the mainland, and other related activities are paid with these funds.

Funds within this level of the pyramid are also allocated for the Health Care Consulting Services contract, for the billing of services rendered by the Pediatric Centers, to the health insurance companies under the GIP and commercial plans for reimbursement. Income generated during FY 2007-2008 amounted to $749,100.09.

State dollars used to provide services to the MCH population surpasses many times the requirements for the match. State funds appropriations are used for the GIP and the implementation of a broad array of programs and services that contribute to improve the health and well being of the MCH population. Table V-1 presents a list of several programs supported by State dollars.

In addition to MCH dollars and the State funds listed in Table V-1, there are other federal sources of funds that contribute to the achievement of the MCH outcomes. These are included in Form #2.

Budget documentation: The Fiscal Affairs Office of the Department of Health and the Office of Federal Affairs maintain budget documentation for Title V funding and expenditures consistent with Section 505(a)(1).

Allocations for FY 2008-2009: The estimated amount of money to run the MCH/CSHCN programs during FY 2008-2009 is as follows:

Federal: $16,278,600.00
Unobligated: $521,050.00
(FY 2007-2008)
State Matching: $12,599,738.00
Program Income: $476,739.00
Total : $29,876,127.00

The unobligated balance allows us to continue running both MCH/CSHCN programs during the first trimester of FY 2008-2009, since the funds herein requested are not available until late November or early December of the fiscal year.

Allocation by MCH Population Groups:
A) $4,883,580 (30%): for the provision of services to pregnant women, mothers and infants.
B) $4,883,580 (30%): for the provision of preventive services for children.
C) $4,883,580 (30%): for the provision of services to CSHCN.
D) $1,627,860 (10%): From this amount, 5% is for program administration of Components A and B; and 5% for administration of the CSHCN program.

Administration: Up to 10% of the federal allocation is used to support salaries and benefits of administrative staff, internal audits, newspaper advertisements, office supplies, document reproduction, mailing, AMCHP annual membership and others. The CSHCN Program covers part of its administrative costs from the 35% allocated from the MCH Block Grant.

Other Requirements
Maintenance of Efforts: Puerto Rico is in compliance with maintenance of effort requirements as described in Section 505(a)(4). In fact, PR exceeded efforts of the 1989 program year. As of December 2007, ASES reported that 1,374,672 individuals of all ages and both sexes were covered by the GIP in Puerto Rico. Among these, 378,049 were women 15-49 years of age, 21,173 were infants <1 years of age, and 415,179 were children 1-19 years old, including CSHCN.

During the FY 2006-2007, of all individuals holding the GIP, the MCH population represented 59.24%. The annual cost per person was $1,157.40 ($96.45 per month). Table V-2 summarizes the funding sources provided by the State to pay for the health services of the population holding the GIP.

Considering that 59.24% (814,356) of the beneficiaries of the GIP represent the MCH population, it is estimated that PR invested over $942,535,634 in state and local funds to pay for the MCH services. We assume that 33%, or $311,036,759, were invested in preventive and primary services for the MCH population. In addition, about $169,750,000 of Medicaid and $42,498,916 of SCHIP were also used for this segment of the population. Several earmarked state funds allocated for special services and programs were also identified. These include $2,169,168 for the Pediatric AIDS program, $198,000 for the Newborn Screening for Hereditary Diseases Program, $100,000 for the EMSC program, and $7,047,217 to support 104 children and adolescents with Catastrophic Illnesses, totaling $9,514,385.00. Definitely, the Commonwealth of Puerto Rico surpasses the matching requirements of Title V. (Table V-1). //2009//

An attachment is included in this section.

VI. Reporting Forms-General Information
Please refer to Forms 2-21, completed by the state as part of its online application.

VII. Performance and Outcome Measure Detail Sheets
For the National Performance Measures, detail sheets are provided as a part of the Guidance. States create one detail sheet for each state performance measure; to view these detail sheets please refer to Form 16 in the Forms section of the online application.

VIII. Glossary
A standard glossary is provided as a part of the Guidance; if the state has also provided a state-specific glossary, it will appear as an attachment to this section.

IX. Technical Note
Please refer to Section IX of the Guidance.

X. Appendices and State Supporting documents
A. Needs Assessment
Please refer to Section II attachments, if provided.

B. All Reporting Forms
Please refer to Forms 2-21 completed as part of the online application.

C. Organizational Charts and All Other State Supporting Documents
Please refer to Section III, C "Organizational Structure".

D. Annual Report Data
This requirement is fulfilled by the completion of the online narrative and forms; please refer to those sections.